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CHANGE

DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

7110.80A CHG 1

341-434
Copies 252

contin

9342

12/19/80

Cancellation Date: retain

SUBJ: CHANGE TO DATA COMMUNICATIONS HANDBOOK

1. PURPOSE. This change transmits revised pages for the Data Communications Handbook.

2. PRINCIPAL CHANGES.

a. This change includes all Service "A" GENOTS through 0/21 and Service "B" GENOTS through 0/242.

b. 4. Explanation of Changes. Second sentence added: Procedural inquiries should be directed to FAA Headquarters, AAT-140.

c. 222. WMSC Circuit Management. Added Leased Service "A" system locations designated as data coordinating stations for ATC and NWS.

d. 581. WMSC Data Base. Updated weather collectives on pages 113 thru 124.

e. Other page changes are Editorial changes.

3. EFFECTIVE DATE. This change is effective April 1, 1981.

4. PAGE CONTROL CHART. See Attachment 1 for page control chart.

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Distribution: ZAT-712 (ALL)

Initiated By: AAT-210

Page Control Chart

Remove Pages	Dated	Insert Pages	Dated
1	1/1/81	1	4/1/81
6	1/1/81	6	4/1/81
8	1/1/81	8	4/1/81
11	1/1/81	11	4/1/81
16, 17	1/1/81	16, 17	4/1/81
26, 27	1/1/81	26, 27	4/1/81
46	1/1/81	46	4/1/81
55	1/1/81	55	4/1/81
63 thru 66	1/1/81	63 thru 66	4/1/81
68 thru 75	1/1/81	68 thru 75	4/1/81
77, 78, 79	1/1/81	77, 78, 79	4/1/81
93	1/1/81	93	4/1/81
102, 103	1/1/81	102, 103	4/1/81
105	1/1/81	105	4/1/81
113 thru 124	1/1/81	113 thru 124	4/1/81

Chapter 1. GENERAL

Section 1. INTRODUCTION

1. PURPOSE.

This Handbook prescribes procedures for use by personnel providing communications services.

2. DISTRIBUTION.

This Order is distributed to selected offices in Washington Headquarters, Region Headquarters, Area Offices, FAA Technical Center, and Aeronautical Center. Copies to all Air Traffic Facilities; all International Aviation Field Offices; General Aviation, Air Carrier and Flight Standard District Offices; other Government Agencies; and interested aviation public.

3. CANCELLATIONS.

Data Communications Handbook 7110.80, and 7 Changes thereto are canceled.

4. EXPLANATION OF CHANGES.

Changes to this handbook are scheduled for January, April, July and October annually. Procedural inquiries should be directed to FAA Headquarters AAT-140.

a. This basic handbook (7110.80A) cancels and replaces Data Communications Handbook 7110.80.

b. Service A GENOTs through GENOT 0/11 and Service B GENOTs through 0/165 are included in this handbook.

c. 183.c, DISTRESS AND URGENCY MESSAGES (SS). Updated to include procedures for facilities receiving Service B.

d. 222. WMSC Circuit Management. Updated ATC and NWS locations designated as data coordinating stations.

e. 285. Circuit 010 (GT 08002-010). Updated to include P73, DRY TORTUGAS, FL. (by EYW). Deleted X53, CLEWISTON, FL. (by FMY).

f. 510. SA-HOURLY AVIATION WEATHER (DOMESTIC). Updated to include PWA, Wiley Post Airport.

g. Appendix D, Service A drawing M-14 updated.

h. Appendix F, Service B circuit drawing M-59 updated.

5. EFFECTIVE DATE.

This handbook is effective January 1, 1981.

Distribution: ZAT-709 (All); AC 45.3 (trng) 1200 cys; FAA 33A, 15; Coast Guard Schd #116; Military Distribution; Army to Ride Req #a65G.

Initiated by: AAT-210

Section 2. SYSTEM DESCRIPTION

6. SCOPE.

This Handbook covers the teletypewriter operational procedures used on the Service A and Service B teletypewriter systems, pertinent International Teletypewriter Procedures, and the conterminous U.S. Service A Weather Schedules. Separate handbooks are provided covering Service C and Service O teletypewriter system operations.

7. TERMS OF REFERENCE

Terms of reference or abbreviations used in this part have the following meanings:

Aeronautical Fixed Service (AFS)—Telecommunications service between specified fixed points, provided primarily for the safety of air navigation and for the regular efficient, and economical operation of air services.

Aeronautical Fixed Circuit—Part of the AFS.

Aeronautical Fixed Telecommunications Network (AFTN)—An integrated worldwide system of aeronautical fixed circuits provided, as part of the AFS, for the exchange of messages between the aeronautical fixed stations within the network.

NOTE.—"Integrated" is to be interpreted as a mode of operation necessary to ensure that messages can be transmitted from any aeronautical fixed station within the network to any other aeronautical fixed station within the network.

APULS—Contraction representing the teleypewriter automatic program units, low-speed. On certain circuits, these units start each transmitter distributor in sequence.

Automatic tape relay—A method of communicating whereby messages are received and transmitted in teletypewriter tape form without manual intervention.

Automatic relay installation—A teletypewriter installation where automatic equipment is used to transfer messages from incoming to outgoing circuits.

NOTE.—This term includes both fully-automatic and semi-automatic installation. Semi-automatic equipment requires the assistance of an operator. Fully-automatic equipment does not.

Date-time group—Six digits representing the day of the month and the time from the twenty-four hour clock in that order; e.g., "142215." Date-time groups have no time zone designator and always represent Greenwich Mean Time (GMT).

Notams composed in ICAO ANNEX 15 format contain an 8 digit date-time group. The first two digits represent the day of the month, the second two digits represent the month of the year, the last 4 digits represent the hour and minutes GMT, e.g., 08091710.

International Telegraph Alphabet No. 2 (ITA No. 2)—An internationally accepted system for defining five level Baudot telegraph code by signal number and pulse arrangement. See Appendix C for details and notes relating to FAA use.

Location indicator (ICAO)—A four-letter code group assigned to the location of an aeronautical fixed facility.

Q signals—Signals listed in Appendix F which are authorized for use in teletypewriter and radiotelegraph communications.

Time group—Four digits representing the hour and minutes from the twenty-four hour clock. Time groups without time zone indicators are understood to be GMT; e.g., "0205." A time zone designator is used to indicate local time; e.g., "0205M." The end and beginning of the day are shown by "2400" and "0000," respectively.

Tributary facility—An aeronautical fixed facility that may receive or transmit messages but does not relay except for the purpose of serving similar facilities connected through it to a communications center.

8. ACCEPTABLE MATERIAL

Acceptability is determined at the point where a message enters the FAA system. Process questionable messages and refer them to the Air Traffic Division for future guidance. Accept for transmission on FAA circuits:

Section 3. TELETYPEWRITER SYSTEMS

22. CIRCUIT ARRANGEMENT

The physical layout of landline circuits does not follow the pattern indicated on circuit drawings. Since selected testrooms are connected by trunklines and a number of stations are served by individual lines from each testrooom, a station or group of stations may be disconnected from a circuit without the knowledge of others on the circuit.

23. CIRCUIT IDENTIFICATION

Landline and radio telecommunications circuits operated by the FAA are assigned two-, three- and four-digit numbers, as indicated on circuit drawings (M14, M59, etc.) in the Telecommunications Circuit Directory. Leased landline circuits associated with the Service F interphone systems are identified by an alphanumeric combination (e.g., 41GP, GL-134, GP1701, etc.). Pacific Region telecommunications circuits, including Service F interphone system and intrafacility circuits, are identified and listed in the Pacific Area Communications Circuit Directory and the Pacific Region Communications Leased Service Directory.

24. LIST OF TELETYPEWRITER SYSTEMS

The following systems are in operation:

a. Service B (Drawing M-59 and M-59B)—The primary purpose of this system is to handle flight movement and control messages.

b. Service A (Drawing M-14)—This system is used primarily for collecting and disseminating aviation weather reports and NOTAMs.

c. Service C (Drawing M-13)—This system is used primarily for collecting and disseminating domestic synoptic weather information.

d. Service O (Drawing M-89)—The Service O System is used primarily for collecting and disseminating international weather information.

e. Aeronautical Fixed Telecommunications Network (AFTN)—The AFTN is used primarily for international flight safety and meteorological information. Instructions, information, and circuit drawings are contained in ICAO Annex 10, DOC 8259, and DOC 7946.

25. OPERATIONAL PROCEDURES

a. Use automatic transmitting equipment for all except short transmissions on unscanned circuits pertaining to circuit operations. The latter may be sent manually at a minimum speed of 35 words per minute. (In Alaska manual transmissions on Service B are prohibited and all tapes must be in full IACO message format.) Do not exceed 69 spaces for each line. Discard an erroneously perforated tape, unless corrections can be made to textual errors by backspacing less than five impulses. Use of more than 4 letter characters could result in message separation during relay. Correct manual transmitting errors by transmitting the error sign "E E E," followed by the last correct word.

b. Service B (conterminous U.S. only)—To provide for the efficient handling of Service B traffic, the following operating practices shall be observed:

(1) Limit a single uninterrupted transmission to ten messages. The test of these messages should not exceed an average of three lines each.

(2) Limit an uninterrupted transmission of a single message or part thereof, to 200 groups.

26. BELL SIGNALS

Attention bell signals may be used on messages assigned a priority requiring immediate delivery. They shall be used on SS precedence messages. When used they shall be inserted following the address line as the first part of the message text.

Authorized bell signals are:

a. Five bells (figures case S) as attention signal when addressees are all within FAA communications networks.

b. When addressees connected through AF TN are included, only SS precedence shall contain bell signals. Use: ⩚ JJJJJ SSSSS ⩛.

27. CIRCUIT LINE UP (CLU)—SVC A, B. C, AND O

(Not applicable in Alaska and Pacific)

Serving carriers providing leased teletypewriter services to FAA no longer require daily scheduled circuit lineup (CLU) periods. When their internal trouble analysis procedures indicate that a circuit, or a portion thereof, will require an interruption of service to perform necessary maintenance work, the toll office scheduling the work will contact the appropriate FAA facility for a circuit release. The circuit number, portion of the circuit to be affected, estimated time and duration of the release, and name of the person in the toll office coordinating the work, shall be obtained upon initial contact by the serving company. Prior to granting a release, the impact on communications must be evaluated and coordination shall be affected with the circuit control station. Before releasing a circuit to a serving carrier (TELCO), the circuit control station shall transmit an appropriate notice on the circuit involved.

28. SERVICE B CONTROL

The BDIS computerized redundant system located at the ARTCC facility in Olathe, Kansas is the backup for Kansas City BDIS and shall assume appropriate duties when delegated by Kanasa City.

29. LINE FEEDS FOLLOWING OR BETWEEN MESSAGES

The BDIS computer will strip all except one line feed received prior to end of message or end of transmission (NNNN). Line feeds will be added as required on all outputed transmissions.

a: Multiple message transmissions to BDIS:

(1) Do not transmit line feeds preceding start of message (< <≡).

(2) Transmit eight line feeds between messages (8≡4N) and two line feeds on the last message of the transmission (2≡4N).

b. Single message transmissions to BDIS:

(1))Transmit two line feeds prior to end of transmission (2≡4N).

c. Transmissions to BDIS for flight strip printer locations:

Transmit two carriage returns, four line feeds, one carriage return, two line feeds prior to end of message or end of transmission (2<4≡1<2≡4N).

30. CIRCUIT INTERRUPTIONS—SERVICE A

Handle teletypewriter circuit interruptions as follows:

a. Notify the appropriate circuit of an anticipated interruption to teletypewriter service. Include an estimate of the outage duration and the reason for the outage.

Example:

```
ALCKT001
TYPNO 8001-001 041700 ESTD 2 HRS
PWRNO
        AUG
```

b. When an unanticipated outage occurs due to an idle line, open line, or continuous garbling, facilities are to contact their local serving center test board first. If the outage persists for an extended period or the serving center advises the condition is being received from the controlling end, then the facility shall contact the WMSC, Kansas City, Missouri, for assistance and corrective action. In reporting this problem to WMSC, facilities should reference their channel number assignment and the serving company line identification.

NOTE.—NATCOM phone numbers are Operations: 926-7191/7195; Admin/Programming: FTS 926-5100; AUTOVON 886-1721, use area code 816 plus FTS number.

31. CIRCUIT INTERRUPTIONS—SERVICE B

Handle Service B circuit interruptions as follows:

a. When an outage occurs or is anticipated on Area B, Center B, or Utility B, and the duration is not expected to be excessive, ask an adjacent facility via interphone to operate its printer in the local position and guard for your traffic during the outage period. Make sure that the facility you contact is on the same circuit as the one on which you are experiencing the outage.

As soon as practicable thereafter, notify the control station of the outage and reason therefor in order that it may be properly recorded.

Example:
JLN GG NKA
TYPNO 9276 042350 EQPMT TRBL. SGF
GUARDING
NNNN

b. When an outage is experienced and the procedure above is not practicable, NKA will be notified via whatever means possible. If an alternate route or guard station cannot be established, NKA will issue an ALCKT message advising that transmission of traffic to the affected facility is being withheld until the circuit is restored (see note **30**).

c. When an outage occurs on a Supplemental B circuit, notify NKA immediately so that traffic may be diverted to the appropriate area circuit. No special coding by originating facilities will be required.

32. AUTHORIZED TRANSMISSIONS—SERVICE A, B, C, and O

a. Authorized transmissions on Services A, C, and O are:

(1) Emergency communications.
(2) Meteorological information.
(3) NOTAMs (except Service C).
(4) GENOTs.
(5) Messages relating to circuit operations.

b. Authorized transmissions on Service B are listed in Chap.2, Sec.1, para. 104.

33-36. RESERVED

Section 4. DEFENSE COMMUNICATIONS SYSTEM (DCS) AUTOMATIC DIGITAL NETWORK (AUTODIN)

37. GENERAL

The AUTODIN is a high-speed, secure, computer-controlled communications system managed by the Defense Communications Agency and common to both civil and military agencies of the U.S. Government. Descriptive details are contained in DCA Publications H500-2-65 and H500-3-65 distributed to all users. FAA Washington headquarters, most regional headquarters, the Aeronautical Center, and all but three ARTCC's have duplex operating capability on the AUTODIN. The FAA Technical Center is served by a secure circuit terminated in FAA Washington headquarters message center which relays their traffic.

38. CIRCUIT SECURITY

All traffic is automatically encrypted on entering the AUTODIN system, reencrypted upon transmission over each link of the network, and restored to its original state at the receiving point. Each AUTODIN facility has a security classification level listed in the serving switching center's routing table against which routing indicators in message headers are automatically checked. If a security mismatch occurs on a message, the message is rejected. Washington headquarters, the Aeronautical Center, and directly connected regional offices are authorized on-line TOP SECRET and below. All other directly connected FAA facilities are authorized on-line SECRET and below. Directly connected locations are listed in ACP 117. CAN-U.S. Supplement 1.

39. AUTODIN USE BY FAA FACILITIES

FAA facilities having access to AUTODIN shall use it for management communications with all other AUTODIN subscribers and with other Government agencies served by connected elements of the National Communications System; e.g., Diplomatic Telecommunications System. For accounting purposes on such traffic, use the term "FAA" on all messages originated by FAA.

a. All unclassified messages for Government or non-Government addressees not served directly by Government communications facilities will be routed to the designated military refile points. (See ACP 117 Series, U.S. Supplement 1; ACP 127 Series, U.S. Supplement 1.)

b. Unclassified messages addressed to FAA activities served by AUTODIN and also addressed to activities served only by FAA systems may be forwarded to all addressees via the agency system.

c. Route via AUTODIN all classified messages.

d. Route via AUTODIN all "Encrypt-For Transmission-Only" (EFTO) flight messages where and when AUTODIN is available. In cases where these protective measures cannot be applied, electrical transmission in the clear over landline/microwave circuits is authorized. In the case of messages designated "EFTO MISSION TRAFFIC", where AUTODIN, approved circuits, or landline/microwave circuits are not available, transmission in the clear is authorized via any available circuit, including radio, within the continental United States, Guam, Hawaii, and Puerto Rico. Outside the continental United States and the above areas, electrical transmissions in the clear is authorized via landline (all metallic) circuits provided that (1) all terminating points of those circuits are located on U.S. controlled bases, stations, or other facilities, (2) the circuits are operated exclusively by U.S. personnel, and (3) non-U.S. personnel are denied uncontrolled access to all terminals and the transmission media of them.

40. SPECIAL INSTRUCTIONS

The military has exclusive responsibility and authority for AUTODIN operating procedures. Refer to Allied Communications Publications (ACP's); Joint Army, Navy, Air Force Publication (JANAP) 128, AUTODIN Operating Procedures; DCS, Military service, and National Security Agency directives for these procedures. FAA facilities should coordinate directly with the serving switching center for assistance in system operation. Security measures and required reporting procedures are contained in FAA Communications Security Handbook 1600.8B, and appropriate NSA and Air Force cryptologic depot directives.

Section 6. NATIONAL, REGIONAL, AND AREA TELETYPEWRITER ISSUANCES

54. GENERAL NOTICES (GENOTs)

Washington Headquarters administrative and operational instructions requiring expeditious systemwide dissemination are transmitted on Service A, B, C, or O, as appropriate, in the form of GENOT's. These GENOT's are transmitted by the Washington Message Center (RWA) and are numbered separately for each system, beginning on 1 January of each year. Because of the necessity for distinguishing GENOT's by Service, to provide discrete distribution by computers, all GENOT's shall be in accordance with the following examples:

a. Service A GENOTs–RWA shall enter Service A GENOTs directly on their WMSC circuit 8003–702 (WMSC channel 100) between 0640Z and 0700Z daily as required. These GENOTs will be disseminated automatically by NATCOM, at 1350Z.

Example:

(input format)

```
ZCZC<≡
KRWA NOUS1 151600<<≡
GENOT RWA 9/01 SVC A FAMAE 260050
7110.80<<≡
(TEXT)<<≡
VAN VUREN AAT-1<<8≡
NNNN
```

b. Service B GENOTs–RWA shall enter Service B GENOTs directly to AFTN via channel 61 at 0900Z daily as required. These GENOTs will be disseminated to all FAA facilities on Service B immediately.

Example:

(input format)

```
ZCZC RWA001>V<<≡
JJ KDOMYF<<≡
DTG KRWAYA<<≡
NOUS2 KRWA 151600<<≡
GENOT RWA 9/15 SVC B<<≡
FF ALRGN ALARTC, Etc<<≡
(TEXT)<<≡
VAN VUREN AAT-1<<8≡
NNNN
```

NOTE.—KDOMYF is a special group code address which allows NATCOM to make the required distribution automatically via AFTN computer.

c. Service C GENOTs–RWA shall enter Service C GENOTs on their WMSC circuit 8003–702 (WMSC channel 100) between 1815Z and 1900Z daily as required. These GENOTs will be disseminated to IFSSs automatically and mailed to regions by the Washington Headquarters Communications Branch, AAT–140.

Example:

(input format)

```
ZCZC<≡
KRWA NOUS3 151600<<≡
GENOT RWA 9/25 SVC C FAMAE 261900
7330.7<<≡
(TEXT)<<≡
VAN VUREN AAT-1<<8≡
NNNN
```

d. Service O GENOTs–RWA shall enter Service O GENOTs directly to NATCOM on their WMSC circuit 8003–702 (WMSC channel 100) daily as required. These GENOTs will be disseminated to IFSSs automatically and mailed to regions by the Washington Headquarters Communications Branch, AAT–140.

Example:

```
ZCZC<≡
RWA W NOUS4 KRWA 151600<<≡
GENOT RWA 9/30 SVC O FAMAE 251900
7330.6<<≡
(TEXT)<<≡
VAN VUREN AAT-1<<8≡
NNNN
```

55. GENOT DISTRIBUTION

Distribute GENOTs as follows:

a. The BDIS, AFTN and WMSC computerized systems will be responsible for relay. Service B GENOTs will contain the ALCKT code of XXB. Prior to transmission of a Service B Priority GENOT, RWA will alert the network to enable stations to activate reperferators.

Example:

```
ZCZC RWA002 4>V<<≡
JJ KDOMYF<<≡
DTG KRWAYA<<≡
GENOT ALERT<<8≡
NNNN
```

b. Kansas City NATCOM shall relay GENOTs to Alaska, Pacific and San Juan for further distribution.

c. *Pacific*—Distribute GENOTs as follows:

(1) Service A and B GENOTs—All ATS facilities, regional and area offices.

(2) Service C and O GENOTs—Honolulu IATSC.

d. GENOTs shall not be reworded or retransmitted by field offices as RENOTs or ARNOTs.

56. REGIONAL NOTICE (RENOT) AND AREA NOTICE (ARNOT)

Administrative and operational instructions requiring expeditious distribution are issued by regional offices as RENOTs and by area offices as ARNOTs. At this time there are only two area offices, located at San Juan, Puerto Rico and Balboa, Canal Zone. Communications requiring limited distribution should be handled by other than the RENOT/ARNOT methods.

Example:

RNY JJ XNY
RENOT 6/66
ALFSS EA (TEXT)
MORGAN AEA1

a. When sending a RENOT or message intended for all facilities under a specific regional office jurisdiction, use the discrete regional calls as assigned in para. **68.**

b. *Pacific* and *Alaska*—Prepare RENOTs and ARNOTs in the ICAO message format.

57. RENOT/ARNOT DISTRIBUTION

The numbering of RENOTs and ARNOTs shall be inserted as part of the text immediately following the contractions "ARNOT/RENOT" and transmitted by the appropriate communications or message center. Transmission to the circuits shall be in accordance with the following:

a. *Alaska and Pacific*—Transmit upon receipt.

b. Service B *(Alaska and Pacfic—Not applicable)*—Transmit according to precedence as follows:

(1) PRIORITY OPERATIONAL: Prepare in 20-line parts and transmit as soon as possible in uninterrupted succession.

(2) ROUTINE OPERATIONAL AND PRIORITY ADMINISTRATIVE: Prepare in 20-line parts and send in succeeding scans, as soon as possible without interruption to higher priority traffic.

(3) ROUTINE ADMINISTRATIVE: Prepare in 20-line parts and send between the hours of 2100 and 0300 LCL.

58. ASSIGNMENT OF PRECEDENCE

GENOT, RENOT and ARNOT precedence shall be assigned as follows:

a. DD (Priority Operational)—To operational messages which require immediate delivery throughout the agency. These messages concern the safe operation of the National Airspace System or safety of aircraft in the air or about to depart. They contain information on matters requiring prompt action and should be as brief as possible. Detailed supplemental or related data of less urgency should be sent as a lower priority message or by air mail when the latter will suffice.

b. FF (Priority Administrative)—To administrative messages which require delivery throughout the agency on the day they are issued. These messages must have urgent impact on the operation of the National Airspace System or aircraft operations.

c. GG (Routine Operational)—To operational messages which require handling as soon as possible, without interruption to higher precedence traffic. These messages are required for conducting the agency's essential work on a day-today basis.

d. JJ (Routine Administrative)—To administrative messages which require delivery by the next working day. Transmission to the system is made between 2100 and 0300 LCL. These messages are supportive of field operations, such as directive Notices. In *Alaska* and *Pacific* JJ messages may be sent at any time.

59. GENOT, RENOT, ARNOT DELIVERY

Service B delivery shall be accomplished according to the precedence assigned:

a. DD (Priority Operational)—Immediate delivery to all addressees.

b. FF (Priority Administrative)—Same as routine except all off-circuit addressees are notified for pickup or telephone delivery. When an office is closed, notify the office chief or duty officer of the addressee and deliver according to requirement.

68. DISCRETE REGIONAL CALLS

The discrete regional call assignments are:

Southern Region (Atlanta)	XTL
New England Regional (Boston)	XBW
Great Lakes Region (Chicago)	XGC
Rocky Mountain Region (Denver)	XDV
Southwest Region (Fort Worth)	XFE
Central Region (Kansas City)	XKC
Western Region (Los Angeles)	XLA
Eastern Region (New York)	XNY
Northwest Region (Seattle)	XST

69. LAW ENFORCEMENT ALERT MESSAGE SUMMARY

A monthly summary of current law enforcement alert messages shall be issued as a Service B GENOT by the Office of Air Transportation Security. It shall be given GG precedence and list all effective alerts by aircraft registration number, type and identification of the originating FSS. Alerts which have been cancelled since the last summary shall also be listed.

Example:

RWA GG XXB
NOUS2 KRWA 151700
GENOT RWA 1/158 SVC B
GG ALRGN 90/200/500 NA90 AC90/250 ALATFAC ALGADO ALACDO ALFSDO

LAW ENFORCEMENT ALERT SMRY NOV 71

STOLEN ACFT

N1234P C150 ROA
N1234Z C150 ROA
N3421F PA28 DCA
N3421P PA28 DCA

CUSTOMS ALERTS

N3484M PA32 AMA
N8263U MO21 DAL

CNL

N5456Z N5802F N8920Z N9737P

MURPHY ASE1

70. FUEL ADVISORY DEPARTURE (FAD) OPERATIONS

When the ATCSCC declares that FAD procedures are in effect all stations will be alerted by XXB message. The message will include the terminal affected and effective dates and times. At completion of alert an XXB FAD complete message will be transmitted. (See para. **113, 156a(6)**)

71. DISCRETE GROUP CODES

A-BDIS employs a group addressing capability, to allow message delivery to multiple locations, based on a single address. Examples of this application, are GENOT/RENOT/NASCOM/ALCKT type messages. Four facilities (ATL/DCA/IND/MCN) can neither originate nor be addressed with these group codes. They must be addressed individually on all messages.

72-76. RESERVED

Section 7. MESSAGE CENTER OPERATION

77. GENERAL

Administrative messages are handled at the Aeronautical Center, the FAA Technical Center, Regional Offices and Washington Headquarters by message centers. Where message centers are not fully manned all the time an associated tie-in facility transmits administrative traffic, during other than business hours. Upon messages inputted by tie-in facilities, the BDIS computer will automatically generate acknowledgements back to the tie-in facilities which serves as acknowledgements from the message centers.

78. AERONAUTICAL CENTER (AC) MESSAGE CENTER (OEX)

Reserved.

79. ALASKAN REGION (AL) MESSAGE CENTER. REGIONAL COMMUNICATIONS CONTROL CENTER (RCCC)

Messages to Alaska Region Communications Control Center shall be addressed to "PANCYA". Include as the first item of the text the reference number of the Division or Branch.

80. CENTRAL REGION (CE) MESSAGE CENTER (RKC)

The Central Region Communications Control Center and Message Center operates daily 0700–2300 local time, the printer is unattended 2300–0700 local time.

Route all messages to Regional Communications Control Center and Message Center. Numbered messages addressed to RKC will be acknowledged by the Message Center when it reopens at 0700.

81. EASTERN REGION (EA) MESSAGE CENTER (RNY)

a. The Eastern Region Message Center hours of operation are 0800–1630 local time Monday through Friday. All traffic transmitted to RNY outside of these hours of operation must carry the condition code "TEB" in addition to "RNY".

b. Messages addressed to Eastern Region personnel having offices at Washington National or Dulles International Airports shall be numbered to DCA at all times. Such messages shall also be addressed to RWA only if they also are destined to NTSB or other FAA offices.

82. EUROPEAN, AFRICA AND MIDDLE EAST REGIONAL OFFICE (EU) MESSAGE CENTER

Reserved.

83. GREAT LAKES REGIONAL (GL) MESSAGE CENTER (RGC)

The Great Lakes Region Message Center is operational with 24-hour monitoring by the Regional Duty Officer.

84. FAA TECHNICAL CENTER (ACT) MESSAGE CENTER (ACY)

Personnel of the message center at the FAA Technical Center will not normally attend Area B circuit 9252 between the hours of 0300–1100 daily. Printers will be left in the operating mode during unattended periods. ACY will no longer be required to acknowledge for the FAA Technical Center traffic sent during unattended periods after 1100Z due to automatic generating of acknowledgements by the computer back to the transmitting facility of traffic destined to the FAA Technical Center.

85. NEW ENGLAND (NE) MESSAGE CENTER (RBN)

The New England Region Communications Message Center hours of operation are 0800–1800 local time Monday through Friday of the administrative work week. Acknowledgments are made by the tie-in facility "BOS" for messages received when "RBN" is not manned by telecommunications personnel. Monitoring is performed by the Regional Duty Officer during the hours of operation of the RCCC.

86. NORTHWEST REGION (NW) MESSAGE CENTER (RSE)

The Northwest Region Message Center is operational from 0600 to 2200 (local time), Monday through Saturday and from 1200 to 2000 (local time), on Sundays and holidays. Printers are unmonitored during the time the office is closed. Messages may be addressed to RSE at any time, acknowledgements will be sent only when the message center is operational.

87. PACIFIC REGION (PC) MESSAGE CENTER, REGIONAL COMMUNICATIONS CONTROL CENTER (RCCC)

Messages to the Pacific Region Communications Control Center shall be addressed to

"PHNLYA". Include as the first item of the text the reference number of the Division or Branch.

88. ROCKY MOUNTAIN REGION (RM) MESSAGE CENTER (RDE)

The Rocky Mountain Region Message Center hours of operation are 0900–1730 local time Monday through Friday, with 24-hour monitoring by the Regional Duty Officer.

89. SOUTHERN REGION (SO) MESSAGE CENTER (RTL)

The Southern Region Message Center hours of operation are 0830–1800 local time, Monday through Friday except holidays, with 24-hour monitoring by the Regional Duty Officer.

90. SOUTHWEST REGION (SW) MESSAGE CENTER (RFW)

The Southwest Region Message Center is operational with 24-hour monitoring. Condition code "RFW" on all classes of messages.

91. WESTERN REGION (WE) MESSAGE CENTER (RLA)

The Western Region Message Center hours of operation are 0700–1600 local time Monday through Friday, with 24-hour monitoring by the Regional Duty Officer. Traffic destined for the Western Region or transmitted by the tie-in facility (LAX) when the message center is not manned by telecommunications personnel, will be automatically acknowledged for by the BDIS computer. All traffic transmitted outside of the hours of operation must include the conditioning code "LAX" in addition to "RLA".

92. WASHINGTON OFFICE (WO) MESSAGE CENTER (RWA)

Include as the first item of the text the routing symbol of the office for which the message is intended.

93. MESSAGE CENTER TIE-IN FACILITY OPERATION

Address and route message traffic to the appropriate tie-in facility as shown in table 1 below:

TABLE 1 MESSAGE CENTER AND TIE-IN FACILITIES

Message Center	*Tie-in Facility*	*Method of Locally Handling Traffic*
Aeronautical Center OEX	None. 24 hour opn	Hand carry
Alaskan Region RCCC	None. 24 hour opn	Hand carry
Central Region RKC	None. Unattended printer 2300–0700 (Local) daily	Hand carry
Eastern Region RNY	Teterboro FSS TEB	Pony circuit
European, Africa, Middle East Region	N/A	N/A
Great Lakes Region RGC	None. 24 hour opn	Hand carry
Technical Center ACY	None. Unattended printer 0300–1100 daily	Hand carry
New England Region RBN	Boston FSS BOS	Service B
Northwest Region RSE	None.	Hand carry
Pacific Region RCCC	None. 24 hour opn	Hand carry
Rocky Mountain Region RDE	None. 24 hour opn	Hand carry
Southern Region RTL	None. 24 hour opn	Hand carry
Southwest Region RFW	None. 24 hour opn	Hand carry
Western Region RLA	Los Angeles FSS LAX	Service B
Washington Office RWA	None. 24 hour opn	Hand carry

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Examples:

(1) Single message transmission and originator acknowledgements generated by BDIS computer.

< < V CHI <≡CHI 001 > 160051 <(6)≡NNNN

Illustrates station identifier (CHI) output sequence number and circuit time group.

< < V SBN <≡SBN 001 > 001 160051 <(6)≡NNNN

Illustrates originator station identifier (SBN) input sequence number of last message received and number of message(s) accepted either one (1) or no more than ten (10) depending on proper adherence to operational message procedures and circuit conditions.

(2) The example below shows message transmitted, the acknowledgements generated by the BDIS computer and illustrates an automatic domestic conversion formatted destined for ICAO through the AFTN system.

Message transmitted:

< <≡MKC FF SAC < <≡
Text < <≡ ≡
NNNN

Acknowledgements:

< < V SAC <≡SAC 048 > 041502 < <(6)≡NNNN
< < V MKC <MKC 001 > 001 > 041502 < <(6)
≡NNNN

Sent to AFTN:

FF KSACYF
041502 KMKCYF
Text

NOTE 1.—All messages received by the BDIS computer will be automatically reformatted and sent to AFTN for statistical processing. When messages are prepared for ICAO dissemination via AFTN use the domestic Area B formats, as indicated under the example "message transmitted".

NOTE 2.—Automatic BDIS network acknowledgements do not replace the requirement for logical acknowledgements (end-to-end) for flight notification messages and messages numbered by originating stations.

d. Suspend numbered message until proper acknowledgement is received.

e. Route and number to the tie-in station messages requiring relay to an off-net facility or through a non-automatic relay station.

f. Retransmit a message, which has previously been acknowledged, as a "DUPE." The only reason for assigning a sequential number would be for informational purposes since the BDIS computer maintains message accountability. When doing so, make sure the sequence number is inserted just prior to "DUPE" which will still be the last word of text.

Example:

RKC JJ RWA
(text) 009 DUPE

g. *Alaska*—Use the next sequence number and the original date-time-group and insert "DUPE" as last word of text.

h. When assigning a new number to a message duplicated on a subsequent date, plus the number and date of the original be sure the new number, plus the number and date of the original is inserted just prior to "DUPE" as the last word of text.

Example:

RKC JJ RWA
(text) 002/24/009 DUPE

i. *Alaska*—same procedure as **h** above.

j. *(Not applicable to Alaska)* Do not assign message numbers to:

(1) Emergency communications.
(2) Domestic civil/military notifications.
(3) Teletypewriter circuit outage notifications.
(4) ALNOT's.
(5) Law enforcement alert messages.

115. OUTAGE FLASH

Alternate routings specified in each outage flash will vary, depending upon the type and extent of the outage. Follow implicitly the routing specified in each outage flash.

116. BDIS COMPUTERIZED GENERATED OUTAGE MESSAGE

(Alaska and Pacific—Not Applicable)

When a line failure occurs between an Area B circuit and NKA BDIS control, a computer generated message alerting facilities of possible delays will be generated. Upon restoration, the facilities will also be advised. Delays would only be encountered due to additional loading on the low-speed relay's adjacent circuit.

117. FAILURE OF OTHER SERVICE B COMPONENTS

When other components of the Service B system fail, take the following action:

a. If the printing-suppression feature of the Model 28 printer fails, restore operation by changing the printer to the local position. Scan all circuit material for messages addressed to the facility. Use spare equipment, where provided, when the printer fails completely.

b. If a T/D fails to respond when polled by the BDIS computer, change the printer to the local position and watch the scan. When your scan call appears, start the T/D manually. This shall be done immediately to avoid interrupting the scan.

c. In the event of a total failure, each circuit has a designated alternative scanning station. These stations shall use a previously prepared tape containing all of the circuit station calls, appropriately notched so that the tape will stop after each call is transmitted. Each call shall consist of the proper codes, followed by enough letters impulses to complete the transmission. Manually transmit this tape at approximately five-minute intervals. These stations shall assume the scanning function as necessary.

118. CIRCUIT OR IDENTIFIER CHANGE

Changes to Service B circuit boundaries, CDC/TSC coding, and addition or stations require documentation in accordance with Order 1800.8D, National Airspace System Configuration Management. Case file action will be initiated by the Facility, Region or AAT-100 depending on the source of the requirement for the action. Completion of the action will be announced by Service B GENOT prepared by AAT-100. In addition the paragraph on use of Facility Status Report (RIS: AT7230-12) In the Facility Operations and Administration Handbook 7210.3 (Chap. 3, Section 4) shall be followed.

119. TAPE PREPARATION AND TRANSMISSION

a. Begin with a series of letters, (paper tape leader) end the tape with a series of letters, (paper tape trailer). Insert the tape so that letters will be transmitted. The trailer should be long enough to allow the EOM (NNNN) to clear the T/D.

(1) For Intracircuit delivery only—condition (< < V) each select identifier (on circuit). Do not use alignment (< <≡) between select codes. Use the alignment function following the last select code prior to the address line.

(2) For Intercircuit delivery only—do not condition select codes, these codes are required on the address line only. Following the tape leader start the address line with the alignment function (< <≡).

(3) Multiple messages in one transmission shall be limited to ten. Eight line feeds are required prior to EOM for all messages except the last message in a multiple transmission. Two line feeds required following the last message of a multiple transmission.

(4) Single message transmission shall have two line feed prior to EOM.

b. The EOM (NNNN) must end each message. If EOM is missing BDIS will not effect delivery.

c. *Alaska*—Refer to AL Region Supplement (7110.10) Appendix 1.

120. BDIS AUTOMATIC MESSAGE REJECTION

The automatic BDIS switching system will reject all messages that are not prepared properly. The errored message with an appended computer generated explanation will be returned to the originator. The originator must retype the errored message correctly or the BDIS computer will continue to reject the transmission. ARTCC 9020 rejection notices and acknowledgements take precedence over BDIS internally generated notices and acknowledgements. The following BDIS internally generated notices will be transmitted as explanations for errored transmissions:

a. SVC QTA RPT IORG—The originator on the address line is in error. This explanation can result from the following errors:

(1) The orginators identifier is invalid.

(2) The originators identifier is not valid for this circuit.

(3) A space does not follow the originators identifier.

(4) Alignment functions detected following other than the last select code on an intracircuit message.

b. SVC QTA RPT IADR—The address line contains one or more invalid addressees. This can result from.

(1) An invalid address indicator.

(2) A space missing between address indicators.

(3) More than nine address indicators on one line.

c. QTA RPT IEOM—The end of message is in error. This can result from:

(1) A short EOM (less than 4Ns).

(2) The EOM is garbled or contains nonprinting functions.

d. SVC QTA RPT IPRI—The priority indicator is in error. This can result from:

(1) Invalid priority indicators.

(2) A space missing after the priority indicators.

e. SVC QTA RPT IFMT—The start of address line cannot be detected. This can result from:

(1) Teletypewriter functions CR CR LF being missing or garbled immediately prior to the address line.

Garbled text will not cause BDIS to reject transmissions. Messages rejected because of IGOR or IEOM will cause the BDIS computer to select all stations on the circuit of origin. This is necessary because BDIS will be unable to determine the message originator. Care must be taken to prepare messages correctly or circuit time will be wasted.

121. BDIS COMPUTERIZED TRANSMITTER START CODE (TSC) POLL AND FUNCTIONS

The TSC poll generated by the BDIS computer calls the outlying facility T/D's. It operates continuously, pausing between calls only long enough to permit T/D's with traffic to respond. Since the TSC poll will hold only for its pre-set period (from 3 to 5 seconds) between calls, the tape must be in the T/D when the scan call is received. Once a transmission is completed, the TSC poll will immediately call the next station; therefore, messages must be perforated on a continuous tape if more than one is to be transmitted per call. The end-of-tape pin, when released, will shut off the T/D. Model 28 printers release the printing suppression feature when the T/D responds to a scan call, thus producing a copy of the transmission.

122. SCAN OF RECORDS CENTERS ON SERVICE B

(Alaska—Not Applicable)

Records Centers will be polled by the responsible circuit control station on a daily basis, between the hours 1400Z and 1500Z only. This time period will allow adequate testing of records center teletypewriter equipment.

a. Upon Declaration of FAA Readiness Level Charlie, including equivalent simulated level, begin continuous scanning of all Records Centers.

b. Scan records centers at any time when directed or requested to do so by AAT-300 or records center personnel.

123. NASNET CIRCUIT OPERATION

NASNET provides communications between National Field Support Group (NFSG) at the FAA Technical Center and FAA automation systems in the field.

a. Authorized transmissions—use these circuits to handle:

(1) Interfacility transmission of NAS support data.

(2) FAA administrative messages.

b. Circuit Utilization—All station or other multiple addressed messages will normally be transmitted by NFSG between 2000Z to 2130Z Monday through Friday except for holidays. All equipment should be in the 'line' or 'unattended' mode during these hours.

c. Circuit Operation—Model 33 ASRs are operated in the 'line' mode and Model 35s are operated in the 'unattended'' mode except when in the 'off line' mode for tape preparation. NASNET is polled by a line control switcher (LCS) located at Kansas City IATSC (KMKM). A special format and ASCII code is used on NASNET, consequently, no relay can be accomplished between NASNET and other Service B circuits.

d. Equipment—Model 33 and 35 ASRs consist of basic ASR equipment, an attendant control set, and a station controller. The controller performs the routine on-line functions required from other stations. All system dialogue is between the LCS and station controller. No condition, call directing, or transmitter start codes are operator appended. The controller responds to polling and call-ins, provides parity detection, activates control codes contained in the message format, and provides alarms and alarm indications. The 'out of service' key is used when changing paper, tape, or ribbon.

e. Tape Preparation and Transmission—Prepare tape for transmission as follows:

(1) 10 to 15 deletes.

(2) Start-of-heading (SOH) signal (Ctrl A).

(3) Message priority code (usually J)

(4) 8-letter address indicators.

(5) Alignment function (<≡).

(6) 6-figure date-time group.

(7) 8-letter originator indicator.

(8) Alignment function (<≡).

(9) Start-of-text (STX) signal (Ctrl B).

(10) Text—72 characters per line. 2880 characters maximum length (heading and text), each line of text followed by alignment function (<≡), last line of text followed by carriage return and 8 line feeds (<8≡).

(11) End-of-text (ETX) signal (Ctrl C).

(12) End-of-transmission (EOT) signal (Ctrl D).

(13) 10 to 15 deletes.

Example:

15 V Ctrl A J⩾KDENZTAT⩾KZDVZRAF<≡
141615⩾KACYZQAT<≡
Ctrl B (text)<8≡
Ctrl C Ctrl D7 V

Insert the tape in the TD so that one or more of the deletes will be transmitted. When the message has been transmitted, do not remove tape from TD until a response is received from the LCS (ACK or NAK) and the SEL light goes out.

f. Line Control Switcher (LCS) Functions—The LCS polls the outlying facilities, provides intra and inter-circuit relays, determines receipt (ACK) or non-receipt (NAK) at destinations and advises sending station status of acknowledgements. The LCS also monitors message inputs and indicates to originator acceptance or rejection of a message and reason for rejection. When a message is relayed with parity errors both the transmitting and receiving stations are advised.

g. Message Acceptance—accept only messages in written form, prepared in accordance with FAA edition of the U.S. Correspondence Manual (Handbook 1360.6) except that message format for NASNET must be followed.

124. REDUCTION OF TRANSMISSIONS DURING PERIODS OF NATIONAL EMERGENCY OR EXCESSIVE CIRCUIT LOADING (CODE NAME-MINIMIZE)

During specified conditions, imposition of MINIMIZE shall be applied to Area B circuits of the national Service B system to expedite the delivery of time critical messages. When MINIMIZE is in effect, only those messages essential to flight movement and control, mission accomplishment or safety of life and property may be transmitted on or relayed to the applicable circuit or circuits. Defer the transmission of administrative and other less urgent traffic on the circuit or circuits of concern until MINIMIZE has been discontinued.

a. MINIMIZE/NCS will be used to designate a national emergency (actual or simulated) affecting all Area B circuits concurrently. The Air Traffic Service will impose, cancel, or modify MINIMZE/NCS by GENOT or XXB procedures.

b. MINIMIZE/FAA designates imposition of the above restrictions on a circuit-by-circuit basis. NKA BDIS will impose MINIMIZE/FAA when the computer generated TSC poll cycle exceeds 8 minutes and will cancel MINIMIZE/FAA when the TSC poll cycle time returns to less than 8 minutes.

Examples:

RWA FF XXB
MINIMIZE/NCS PROCEDURES IN EFFECT.
REFER TO 7110.80–124.
RWA 271424

NKA FF XXB

ALCKT 002 MINIMIZE/FAA PROCEDURES IN EFFECT ON CKT 9284. RESTRICT MESSAGES FOR CKT TO FLIGHT MOVEMENT FLIGHT CONTROL MISSION ACCOMPLISHMENT SAFETY OF LIFE/PROPERTY. REFER TO 7110.80–124.

NKA 271424
NKA FF XXB

ALCK 004 MINIMIZE/FAA PROCEDURES DISCONTINUED ON CKT 9284. RESUME NML TFC TO 9284.

NKA 271521.

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correct formatting and addressing of all FPLs when the information is by direct input to the AFTN. When FPLs are filed through ATS units, aircraft operating agencies or serving companies are responsible for providing all required information and identifying ATS units to whom the FPL must be addressed. ATS units will be responsible for formatting and message transmission.

d. Address IFR FPL messages to the ARTCC serving the airport of departure and to all ATS units (including oceanic) providing air traffic control service or concerned with flight along part or the whole of the route to be flown except FAA ATCTs and other conterminous U.S. ARTCCs. If more than one message is necessary to accomplish distribution, the ARTCC serving the airport of departure must be addressed in each message.

NOTE.—Within the NAT Region, FPLs on turbojet aircraft transiting the control areas of Gander Oceanic, New York Oceanic, Reykjavik, Santa Maria Oceanic, Shanwick Oceanic and /Sondrestrom (south of 70 degrees) within 90 nautical miles of the control area boundary, shall be addressed to the adjacent ACC to provide lateral separation. For all other aircraft, a 120 nautical mile proximity limit shall apply.

e. Transmit all IFR FPLs to ARTCCs not less than one hour prior to the proposed departure time. Do not hold FPLs until after departure time and transmit as a combined FPL and DEP. Separate FPL and DEP messages must be transmitted.

f. Address aircraft movement messages only to those ATS units responsible for the provision of relevant service, except that when so requested by the operator concerned, these messages, when transmitted via the AFTN, may also be routed, as specified by the operator or his representative to:

(1) One addressee at the point of intended landing or point of departure; and

(2) Not more than two operational control units concerned.

g. The ARTCC serving the departure airport shall transmit the departure message (DEP) on IFR aircraft to all known recipients of the FPL message. Flights between conterminous U.S. and Canada (excluding Gander Oceanic), Alaska, Hawaii and Puerto Rico do not require DEP messages. Discontinuance of DEP messages affecting the route of flight can only be accomplished by ICAO Regional Air Navigation Agreement.

195. USE OF THE AFTN/SERVICE B

Prepare and transmit ATS messages as set forth in Section 2. Address these messages as follows:

a. Include one 6 or 8 character addressee indicator for each addressee. There can be no more than one line (69 characters including separating spaces) of addressees. When more than the allowable number of addressees are required, two or more transmissions of the message, each with no more than the allowable number of addresses, must be made. The 6 or 8 letter combination addressee indicators are composed as follows:

(1) The four-letter ICAO location indicator; e.g., MBLB. Use only those listed in ICAO DOC 7910. Do not use international location identifiers from the list in Handbook 7350.1.

(2) A 2-letter designator for the authority, service or operator, or if no designator has been assigned, afix "YX" for military, "ZZ" for aircraft in flight, or "YY" for all other cases; e.g., MBLBYY.

NOTE.—The most frequently used and authorized designators are:

YA—Government Civil Aviation Authority (FAA)
YC—Rescue Coordination Center (RCC)
YD—Authority Supervising the Aerodrome
YF—Aeronautical Fixed Station (FSS/IFSS/IATSC)
YM—Meteorological Office (NWS)
YN—International NOTAM Office (NOF)
YW—Military Flight Operational Control Center (ACP)
YX—Military Organization (BASOPS)
YY—Organization not allocated a 2-letter designator
ZF—Center in charge of a FIR/UIR when the message is relevant to a VFR flight (AMIS)
ZO—Oceanic Air Traffic Control Center
ZQ—Computer Facility at ACC/ARTCC
ZR—ACC/ARTCC
ZZ—Aircraft in flight

(3) A 2-letter designator may appear following an air carrier designator to indicate the department or division of the organization addressed.

b. Filing time. A 6-digit date/time group indicating the time the message is filed with the FSS/IFSS/IATSC for transmission.

c. Originator indicator. Consists of a 6- or 8-letter sequence similar to an Address Indicator, identifying the place of origin and the organization originating the message.

d. Supplementary address and origin information. When the 2-letter designators "YX" "ZZ", or "YY" are used, identify the aircraft operator or organization at the beginning of the text preceding the start-of-ATS data symbol (←), in the same order as in the addressee(s) and/or originator indicator(s). Where there is more than one such insertion, the last should be followed by the word "stop." Where there are one or more insertions in respect of Addressee Indicators plus an insertion in respect of the Originator Indicator, the word "FROM" is to appear before that relating to the originator.

e. When addressing Flight Plan Messages, Amendment Messages relating thereto and Flight Plan cancellation messages to centers use one of the 2- letter designators as follows:

(1) If message is relevant to IFR and:

(a) The center is computer equipped (U.S. ARTCCs) use ZQ.

(b) The center is not computer equipped, use ZR.

(c) Relevant to oceanic operations, use ZO.

(2) If message is VFR (AMIS), use ZF.

(3) If SVC or administrative, use ZR.

NOTE.—Some centers may request specific addressing different from above. ZT and ZP are not used in U.S. application.

196. FLIGHT PLAN FORM INSTRUCTIONS

Complete the shaded areas of the first two lines at the facility where the form is handed in or filed. Fill in the specific addressees and originator identification only as required. Symbols on the form are to facilitate teletypewriter transmission and are described as follows:

a. Alignment function—2 carriage returns and one line feed.

b. Start-of-ATS-data signal—upper case K (←). (Corresponds to International Telegraph Alphabet (ITA) No. 2, signal No. 11, open parenthesis "(".)

c. Start-of-field signal upper case A (↑).* (Corresponds to ITA No. 2, signal No. 1, single hyphen (-).)

d. Small letter "s"—indicates space.

e. End-of-ATS-data signal—upper case L (↖). (Corresponds to ITA No. 2, Signal No. 12,")".)

*NOTE.—This symbol is indicated by a vertical half space line on Form 7233–4.

197. USE OF FLIGHT PLAN FORM 7233-4

Use International Flight Plan, FAA Form 7233–4 (See Appendix E—7110.10F) or ICAO Model Flight Plan Form displayed in DOC 4444 page A–8 and apply the procedures set forth in this section for flight:

a. Originating within conterminous U.S. and Canada and destined non-stop to points beyond those areas.

b. Originating within or transiting Pacific Flight Information Regions (FIRs) and destined to or from FIRs beyond the Pacific Region, including the NAM Region.

NOTE 1.—The NAM Region encompasses the conterminous U.S., Alaska and Canada to the North Pole.

NOTE 2.—FAA Form 7233–1, 7233–3 or Military Form DD–175, and domestic procedures are used for flights in the conterminous U.S., Canada, and the Honolulu Alaskan and San Juan domestic control areas.

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199. TRANSMISSION OF ICAO ATS MESSAGES

The following are examples of ICAO message types most likely to appear on AFTN/Area B circuits. The number above the data corresponds to the field type numbers on the flight plan form (FAA Form 7233–4) (Appendix B) and on the chart of "standard ATS messages and their composition (Appendix C)." Symbols used in the examples are those shown on the keyboard and printed on the printer of FAA weather type teletypewriters. When using communications type teletypewriters the keyboard and printed copy display the symbols expressed as ITA No. 2 signal in paragraph **196** and shown in Appendix C.

221. MESSAGE ACQUISITION

Meteorological information, whether hourly or nonhourly, shall be entered during the times specified in this Handbook. When scheduled data are not available for transmission on time, the contraction DLAD or FINO shall be sent in lieu thereof as appropriate.

222. WMSC CIRCUIT MANAGEMENT

a. The following ATC and NWS locations are designated as data coordinating stations for the indicated circuits:

(1)

001/BOSL
002/MCB
003/ALB
004/DUJ
005/HAR
006/CRW
007/ROA
008/AND
009/SSI
010/EYW
011/DET
012/CLE
013/CHI
014/MKL
015/MGM
016/MSP
017/MKE
018/ST
019/ICT
020/FYV
021/CLL
022/GLS
023/SAT
024/HON
025/RAP
026/OMA
027/DEN
028/GCK
029/ABI
030/ROW
031/BIL
032/BOI
033/GJT
034/LAS
035/PHX
036/SFF
037/PDX
038/SAC
039/OAK
040/SAN
041/GKN
042/BIG
043/OTZ
044 JUN
045/AKN
150/ZCP
151/ZCG
152/ZCK
153/ZCO
154/ZCJ
155/ZCR
156/ZCL
157/ZCT
158/ZCS
159/ZCM
160/ZCD
161/ZCN
162/ZCU
163/ZCB
164/ZCF
165/ZCC
166/ZCA
167/ZCW
168/ZCH
169/ZCI
215/HNL
423/ATL
450/DEN
451/MIA
452/PHX
453/ISP
470/SEA
471/MKC
472/ANC
473/FAT
474/LAX
475/BNA
476/RDU
477/BOS
478/MEM
479/DAL
480/CLE
481/CHI
482/MSP
483/HNL

(2) NWS Eastern Region
105-109 058 061 066 069 077 079
080 081 086 089 090

(3) NWS Southern Region
110-114 054-057 059 065 067-068
078 084-085 091

(4) NWS Central Region
115-118 053 063-064 070-071 073-075
082 092-098

(5) NWS Western Region
119-122 051 060 062 072 076 083
087-088 099

(6) NWS Alaska Region
047-050

(7) NWS Pacific Region
214

Coordinating stations shall notify WMSC of any routine changes desired (not more than five per month) in the scheduled data received on their circuit. Notification shall be made by mail (copies to the Air Traffic Division, ACE-550, and AAT-140) after coordinating a suggested change with all FSSs on the circuit. A majority of stations favoring a change will justify notification to WMSC. Any major data format changes such as presenting data by states shall not be requested more than once a year and such requests shall be forwarded to AAT-140 through the Air Traffic Division. Urgent matters requiring telephone notification shall be processed through the Air Traffic Division who may coordinate through AAT-140.

b. Coordinating stations shall not request data that exceeds the following criteria:

(1) SA—140 U.S. Civil reports including not more than 25 collected on your circuit.

(2) FT—115 U.S. Civil forecasts with no more than 80 scheduled in one hour.

(3) FA—4 U.S. Civil forecasts.

(4) FD—30 U.S. Civil forecasts.

(5) SD—5

(6) UA—50 reporting locations.

(7) Combination SA—20 relayed SW, military, Canadian, Mexican, Alaskan and Hawaiian reports.

(8) Combination Canadian FD and NOTAMs—10.

(9) Combination Mexican FA/UPMX/FT, Canadian FT/FA, and/or Caribbean Bulletin—10.

(10) WH—1.

(11) WST-3.

In addition to above variable data each circuit will receive AC/ASUS, 1/FSUS, all FDC NOTAMs, all distant NOTAMs for each SA received hourly, TWEB amendment notice for material applying to stations on the circuit, GENOTs, CIRNOTs, and WA and WS for FA forecasts selected.

c. NATCOM will issue at least semi-annually in January and July a computer prepared print out listing all data relayed to a specific circuit. A copy will be mailed to the coordinating station.

NOTE.—Paragraph **c** is applicable to only FSS polled Service A area circuits.

223. HANDBOOK AMENDMENTS

Amendments to this aprt of the Handbook will be made by four media:

(1) General Notices (GENOT).

(2) Circuit Notices (CIRNOT).

(3) Page revisions issued at frequent intervals.

(4) Complete Handbook revisions.

a. *Alaska*—Amendments to Weather Schedules contained in AL-7330.1 will be made by RENOT/MET PANC message.

224. CIRCUIT NOTICE (CIRNOT)

a. Whenever changes in procedures or data base occur WMSC will issue an ALCKT CIRNOT. Those containing permanent changes will be coordinated with AAT-100 for later GENOT and/or Handbook 7110.80 page change issuance. Whenever the WMSC suffers a catastrophic failure or loss of specific data an ALCKT CIRNOT will also be issued. The former will be considered cancelled on the receipt of a GENOT or page change, and the latter after restoration of system or specific data.

Examples:

WMSC CIRNOT 4/20
ALCKT
FAMAE (DTG)
DATA BASE CHANGE 7110.80 PARA ETC. OR PROCEDURE CHANGE 7110.80 PARA ETC.
WMSC CIRNOT 4/21
ALCKT
FAMAE (DTG) (TIME OF OUTAGE STARTING OR LOSS OF SPECIFIC DATA)
WMSC DWN UNTIL (DTG) (TIME OF RESTORATION)
NO CURRENT DATA UNTIL (DTG) (ESTIMATED TIME OF DATA REFURBISHMENT)

ALCKT CIRNOTS shall have serial numbers from the first of the year, but all will not necessarily be received on all circuits.

225. USE OF FINO

Whenever a report from an SA location, entered by another location, is not available, the entry station shall enter FINO for the missing report. The WMSC will recognize FINO as a valid report and transmit it to its programmed circuits. Without a report or FINO during distribution of scheduled reports, a circuit could remain idle for up to two minutes while the computer waits for the missing report.

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Section 2. SA OBSERVATION COLLECTION

276. CIRCUIT 001 (GT 08001-1)

AUG	Augusta, ME (Augusta Airport)
BHB	Bar Harbor, ME (Bar Harbor Airport) (by AUG)
RKD	Rockland, ME (Rockland Airport) (by AUG)
HUL	Houlton, ME (Houlton Airport)
PQI	Presque Isle, ME (by HUL 0500–1900 Lcl)
LEB	Lebanon, NH (Lebanon Airport)
VSF	Springfield, VT (Springfield State Airport) (by LEB)
BML	Berlin (Milan), NH (Berlin Airport) (by LEB)
HIE	Whitefield, NH (Whitefield Regional Arpt) (by LEB)
RUT	Rutland, VT (Rutland State Airport) (by LEB)
CON	Concord, NH (Concord Airport)
MHT	Manchester, NH (Grenier Field) (by CON)
EEN	Keene, NH (Dillant Hopkins Airport) (Mon-Fri 0700–2000 Lcl, Sat 0700–1400 Lcl, Sun 1100–2000 Lcl) (by CON)
LCI	Laconia, NH (Laconia Airport) (by CON)
BOS	Boston, MA (Logan Airport)
BED	Bedford, MA (Hanscom Field) (0700–2300 Lcl) (by BOS)
ACK	Nantucket, MA (Nantucket Memorial Airport) (0600–2300 Lcl) (by BOS)
HYA	Hyannis, MA (Barnstable Airport) (0600–2300 Lcl) (by BOS)
EWB	New Bedford, MA (New Bedford Airport) (0700–2300 Lcl) (by BOS)
MVY	Marthas Vineyard, MA (Marthas Vineyard Airport) (0600–2200 Lcl) (by BOS)
OWD	Norwood, Ma (Norwood Memorial Airport) (0700–2300 Lcl) (by BOS)
BVY	Beverly, MA (Municipal Airport) (0700–2300 Lcl) (by BOS)
LWM	Lawrence, MA (Lawrence Muni Arpt) (0800–2000 Lcl) (by BOS)
BGR	Bangor, ME (Bangor International Airport)

277. CIRCUIT 002 (GT 08001-002)

ISP	Islip, NY (Long Island—MacArthur Airport)
JFK	New York, NY (John F. Kennedy Intn'l Arpt) (by ISP)
FRG	Farmingdale, NY (Republic Field) (by ISP)
FOK	Westhampton Beach, NY (Suffolk County Airport) (07–23 Lcl) (by ISP)
TEB	Teterboro, (Bendix, NJ (Teterboro Airport)
MMU	Morristown, NJ (by TEB)
EWR	Newark, NJ (Newark Airport) (by TEB)
LGA	New York, NY (La Guardia Airport) (by TEB)
HPN	White Plains, NY (Westchester County Arpt) (by TEB)
CDW	Caldwell, NJ (Essex County Airport (09–17 Lcl) (by TEB)
BDL	Windsor Locks, CT (Bradley Field)
BAF	Westfield, MA (Barnes Airport) (0700–2300 lcl) (by BDL)
HVN	New Haven, CT (New Haven Airport) (1200–0400Z) (by BDL)
GON	Groton, CT (Trumbull Field) (by BDL)
HFD	Hartford, CT (Hartford/Brainard Airport) (by BDL)

278. CIRCUIT 003 (GT 08001-003)

UCA	Utica, NY (Oneida County Airport)
ART	Watertown, NY (Watertown Airport)
AVP	Avoca, PA (Wilkes-Barre-Scranton Airport)
7TB	Tobyhanna, PA (by AVP)
POU	Poughkeepsie, NY (Dutchess County Airport)
MSV	Monticello, NY (Sullivan County Airport) (by POU)
SWF	Newburgh, NY (Stewart Airport) (1100–0300Z) (by POU)
DXR	Danbury, CT (Danbury Municipal) (0800–2000 Lcl) (by POU)
ALB	Albany, NY (Albany County Airport)

PSF	Pittsfield, MA (Pittsfield Airport) (by ALB)
SCH	Schenectady, NY (0700–2300 Lcl by ALB)
GBR	Great Barrington, MA (08000–1700 Lcl by ALB)
GFL	Glens Falls, NY (Warren County Airport)
MPV	Montpelier, VT (Barre-Montpelier Airport)
MSS	Massena, NY (Richards Airport)
OGS	Ogdensburg, NY (by MSS)
SLK	Saranac Lake, NY (Adirondack Airport) (0600–2100Lcl) (by MSS)

279. CIRCUIT 004 (GT 08001-004)

BFD	Bradford, PA (Bradford Regional Airport)
JHW	Jamestown, NY (Jamestown Airport) (Sun-Fri 0900–2000 Lcl—Sat 1000–2000 Lcl) (by BFD)
DUJ	DuBois, PA (Jefferson County Airport)
PSB	Philipsburg, PA (Philipsburg Airport)
UNV	University Park Airport, PA. (By PSB)
AGC	Pittsburgh, PA (Allegheny County Airport)
PIT	Pittsburgh, (Coraopolis), PA (Greater Pittsburgh Airport) (by AGC)
LBE	Latrobe, PA (Latrobe Airport) (by AGC)
ERI	Erie, PA (Port Erie Airport)
BUF	Buffalo, NY (Buffalo Airport)
ELM	Elmira, NY (Chemung County Airport)
ITH	Ithaca, NY (Tompkins County Airport) (0600–2200 Lcl) (by ELM)
IPT	Williamsport, PA (Williamsport Airport)
AOO	Altoona, Martinsburg, PA (Blair County Airport)
JST	Johnstown, PA (1100–0300Z) (by AOO)

280. CIRCUIT 005 (GT 08001-005)

DCA	Washington, DC (Washington National Airport)
IAD	Chantilly, VA (Dulles International Airport) (by DCA)
CXY	Harrisburg, PA (Capital City Airport) (by HAR)
MDT	Middletown, PA (Harrisburg International Airport/Olmstead Field) (by HAR)
RDG	Reading, PA (General Spaatz Airport) (by HAR)
LNS	Lancaster, PA (Lancaster Airport) (0700–2300 Lcl) (by HAR)
MTN	Baltimore, MD (Glenn L. Martin Airport) (0700–2300 Lcl) (by HAR)
PNE	Philadelphia, PA (North Philadelphia Airport)
PHL	Philadelphia, PA (Philadelphia International Airport) (by PNE)
TTN	Trenton, NJ (Mercer County Airport) (by PNE)
MIV	Millville, NJ (Millville Airport)
SBY	Salisbury, MD (Salisbury Wicomico County Airport)
WAL	Wallops Island, VA (NASA Airport) (0700–1700 Lcl) (by SBY)

281. CIRCUIT 006 (GT 08001-006)

EKN	Elkins, WV (Elkins Municipal-Randolph County Airport) (1030–0230Z)
BLF	Bluefield, WV (Mercer County Airport)
CRW	Charlestown, WV (Kanawaha County Airport)
HTS	Huntington, WV (Tri-State Airport)
PKB	Parkersburg, WV (Wood County Airport)
HLG	Wheeling, WV (Wheeling, Ohio County Airport)
MGW	Morgantown, WV (Morgantown Airport)
CKB	Clarksburg, WV (Benedum Airport) (by MGW)
MRB	Martinsburg, WV (Martinsburg Airport)
HGR	Hagerstown, MD (Hagerstown Airport) (by MRB)

282. CIRCUIT 007 (GT 08001-007)

RWI	Rocky Mount, NC (Rocky Mount/Wilson Airport) (07–22 Lcl)
EWN	New Bern, NC (Simmons-Nott Airport)
OAJ	Jacksonville, NC (Albert J. Ellis Airport) (by EWN)
ISO	Kinston, NC (Kinston Stallings Field) (by EWN)
ROA	Roanoke, VA (Roanoke Municipal Airport)
SSU	White Sulphur Springs, WV (Greenbrier Airport) (08–Sunset) (by ROA)
DAN	Danville, VA (Danville Airport) (0600–2200 LST)
HSP	Hot Springs, VA (Ingalls Field) (0900–1700 Lcl) (by ROA)

LWB	Lewisburg, WV (Greenbrier Valley Airport) (1000–2100 Lcl) (by ROA)
CHO	Charlottesville, VA (Albemarle Airport)
SHD	Staunton, VA (Shenandoah Valley Airport) (0600–2400 LST) (by CHO)
RIC	Richmond, VA (Byrd Field)
PHF	Newport News, VA (Patrick Henry Airport)
ECG	Elizabeth City, NC (Elizabeth City CGAS) (1100–0200Z)

283. CIRCUIT 008 (GT 08002-008)

CHS	Charleston, SC (Charleston AFB/Municipal Airport)
AND	Anderson, SC (Anderson Airport) (07–22 Lcl)
GMU	Greenville Downtown Airport, SC (by GRR 0700–2300)
GSP	Greer, SC (Greenville-Spartanburg Airport)
HKY	Hickory, NC (Hickory Airport)
SPA	Spartanburg, SC (Spartanburg Downtown Memorial Airport) 1000–0100Z) (by GSP)
INT	Winston-Salem, NC (Smith-Reynolds Airport) (by GSO)
RDU	Raleigh, NC (Raleigh-Durham Airport)
FAY	Fayetteville, NC (Grannis Airport) (by RDU)
SOP	Southern Pines, NC (Pinehurst/Southern Pines Airport) (by RDU)
FLO	Florence, SC (Florence Airport)
CRE	Crescent Beach, SC (Myrtle Beach Airport) (1300–0100Z)

284. CIRCUIT 009 (GT 08002-009)

AMG	Alma, GA (Bacon County Airport) (1100–0300Z)
JAX	Jacksonville, FL (Jacksonville Intnl Airport)
CRG	Jacksonville, FL (Craig Municipal Airport) (by JAX)
GNV	Gainesville, FL (Gainesville Airport)
TLH	Tallahassee, FL (Municipal Field)
PFN	Panama City, FL (Bay County Airport) (0600–2300 Lcl) (by TLH)
VLD	Valdosta, GA (Valdosta Airport) (07–22 Lcl)
ABY	Albany, GA (Albany Airport)
7A9	Plains, GA (Peterson Airport) (by ABY)
MGR	Moultrie, GA (Moultrie-Thomasville Airport) (0530–1945 Lcl) (by ABY)
MCN	Macon, GA (Macon-Cochran Airport)
SAV	Savannah, GA (Travis Chatham Airport)
SSI	Brunswick (St. Simons Island), GA (McKinnon Airport)

285. CIRCUIT 010 (GT 08002-010)

VRB	Vero Beach, FL (Vero Beach Airport)
MIA	Miami, FL (Miami International Airport)
FLL	Fort Lauderdale, FL (Ft. Lauderdale-Hollywood, Intnl. Airport) (by MIA)
TNT	Miami, FL (Dade-Collier Training and Transition Airport) (Mon-Fri 07–19 Lcl Sat-Sun 07–13 Lcl) (by MIA)
EYW	Key West, FL (International Airport)
FMY	Fort Meyers, FL (Page Field)
PIE	St. Petersburg, FL (Pinellas County Intnl. Airport)
SRQ	Sarasota, FL (Sarasota-Bradenton Airport) (0600–2400) (by PIE)
BOW	Bartow, FL (Bartow Municipal Airport) (0900–1700 Lcl Mon-Fri plus night as reqd) (by PIE)
MLB	Melbourne, FL (Cape Kennedy Regional Airport)
TIX	Titusville, FL (Ti-Co Airport) (0800–2100 Lcl) (by MLB)
ORL	Orlando, FL (Orlando Municipal Airport)
MCO	Orlando, FL (McCoy AFB) (by ORL)
SFB	Sanford, FL (by ORL)
P73	Dry Tortugas, FL (by EYW)

286. CIRCUIT 011 (GT 08003-011)

LAN	Lansing, MI (Capital City Airport)
JXN	Jackson, MI (Reynold Field)
MBS	Saginaw, MI (Tri-City Airport)
DET	Detroit, MI (Detroit City Airport)
DTW	Detroit, MI (Detroit Metropolitan Wayne County Arpt) (by DET)
YIP	Detroit, MI (Willow Run Airport) (by DET)
PTK	Pontiac, MI (Pontiac Airport) (0600–2400 Lcl) (by DET)
ARB	Ann Arbor, MI (Municipal Airport) (0800–2000 Lcl) (by DET)

287. CIRCUIT 012 (GT 08001-012)

CMH	Columbus, OH (Port Columbus Airport)
MFD	Mansfield, OH (Mansfield Airport) (by CMH)
OSU	Columbus, OH (Ohio State University Airport) (by CMH)
LUK	Cincinnati, OH (Cincinnati Municipal/Lunken Field)
CVG	Cincinnati, OH (Greater Cincinnati Airport) (by LUK)
DAY	Dayton, OH (Dayton Airport)
FDY	Findlay, OH (Findlay Airport)
CLE	Cleveland, OH (Cleveland-Hopkins Intnl. Airport)
BKL	Cleveland, OH (Burke-Lake Front Airport) (by CLE)
CGF	Cleveland, OH (Cuyahoga County Airport) (0700–2300) (by CLE)
YNG	Youngstown, OH (Youngstown Airport)
FKL	Franklin, PA (Chess/Lamberton Airport) (by YNG)
ZZV	Zanesville, OH (Zanesville Airport)

288. CIRCUIT 013 (GT 08003-013)

LAF	Lafayette, IN (Purdue University Airport)
IND	Indianapolis, IN (Indianapolis-Weir Cook Airport)
MIE	Muncie, IN (Delaware Co. Airport/Johnson Field) (0700–2300 lcl) (by IND)
BMG	Bloomington, IN (Kister's Airport) (by IND)
HUF	Terre Haute, IN (Hulman Airport)
DPA	West Chicago, IL (Dupage County Airport) (by CHI)
CGX	Chicago, IL (Meigs Field) (by CHI)
MDW	Chicago, IL (Chicago Midway Airport) (CHI)
ORD	Chicago, IL (Chicago O'Hare International Airport) (by CHI)
ARR	Aurora, Il. Muni Arpt (by CHI 0700–2100 Lcl)
RFD	Rockford, IL (Greater Rockford Airport)
SBN	South Bend, IN (Michiana Regional Airport)
AZO	Kalamazoo, MI (Kalamazoo Airport) (by SBN)
BTL	Battle Creek, MI (Kellog Airport) (by SBN)
EKM	Elkhart, IN (0600 0000 lcl) (by SBN)
BEH	Benton Harbor, MI (Ross Field by SBN)
FWA	Ft. Wayne, IN (Baer Field)

289. CIRCUIT 014 (GT 08002-014)

TRI	Bristol, TN (Tri City Airport) (06–22 Lcl)
LNP	Lonesome Pine, VA (Daily 07–07 Lcl two hour intervals) (by TRI)
CSV	Crossville, TN (Crossville Airport)
BNA	Nashville, TN (Nashville Metropolitan Airport)
CKV	Clarksville, TN (Outlaw Field) (Mon-Fri, 0600–2100 Lcl) (Sat 0600–2100 Lcl) (Sun 0900–2100 Lcl) (by BNA)
MKL	Jackson, TN (McKellar Airport)
PAH	Paducah, KY (Barkley Airport)
BWG	Bowling Green, KY (Bowling Green-Warren County Airport)
OWB	Owensboro, KY (Owensboro-Davie County Airport) (1200–0300Z) (by BWG)
SDF	Louisville, KY (Standiford Field) (by LOU)
LOU	Louisville, KY (Bowman Field) (by LOU)
513	Pikeville, KY (by LOU)
LOZ	London, KY (Corbin-London War Memorial Airport)
TYS	Knoxville, TN (McGhee-Tyson Airport)
DKX	Knoxville, KY (Knoxville Downtown Island Airport) (07–22 Lcl) (by TYS)

290. CIRCUIT 015 (GT 08002-015)

MGM	Montgomery, AL (Dannelly Field)
AUO	Auburn, AL (Auburn-Opelika Airport) (0800–1300 Lcl) (by MGM)
CEW	Crestview, FL (Crestview Airport)
PNS	Pensacola, FL (Pensacola Airport)
TCL	Tuscaloosa, AL (Van De Graaff Airport) (07–22 Lcl)
BHM	Birmingham, AL (Birmingham Airport)
MSL	(Muscle Shoals, AL (Muscle Shoals Airport)
TUP	Tupelo, MS (Tupelo Airport) (by MSL)
ANB	Anniston, AL (Anniston/Calhoun County Airport)
GAD	Gadsen, AL (Gadsen Airport) (by ANB)
RMG	Rome, GA (Russell Field) (Amos)
FTY	Atlanta, GA (Fulton County Airport) (by ATL)
ATL	Atlanta, GA (Atlanta Airport)
DHN	Dothan, AL (Dothan Airport)

291. CIRCUIT 016 (GT 08003-016)

MQT	Marquette, MI (Marquette County Airport)
AUW	Wausau, WI (Alexander Airport)
CMX	Houghton, MI (Houghton County Airport)
EAU	Eau Claire, WI (Eau Claire Airport)
GRB	Green Bay, WI (Austin-Straubel Airport)
OSH	Oshkosh, WI (Wittman Field) (0700–2300 LST) (by GRB)
ATW	Appleton, WI (Outagamie Airport) (0700–2300) (by GRB)
HIB	Hibbing, MN (Hibbing Airport)
MSP	Minneapolis, MN (Minneapolis-St. Paul Intnl. Airport)
PLN	Pellston, MI (Emmett County Airport)
TVC	Traverse City, MI (Traverse City Airport)

292. CIRCUIT 017 (GT 08003-017)

LNR	Lone Rock, WI (Tri-County Airport) (0800–1600 Lcl)
CID	Cedar Rapids, IA (Cedar Rapids Airport)
DSM	Des Moines, IA (Des Moines Airport)
LSE	La Crosse, WI (La Crosse Airport)
MCW	Mason City, IA (Mason City Airport)
MKE	Milwaukee, WI (General Mitchell Field)
MWC	Milwaukee, WI (Timmerman Field) (0600–2100 Lcl) (by MKE)
OTM	Ottumwa, IA (Ottumwa Industrial Airport)
RST	Rochester, MN (Rochester Airport)

293. CIRCUIT 018 (GT 08003-018)

UIN	Quincy, IL (Baldwin-Quincy Airport)
COU	Columbia, MO (Columbia Regional Airport)
IRK	Kirksville, MO (Clarence Memorial Airport) (by COU) (0600–2100 plus 0000 and 0300 Lcl)
JEF	Jefferson City, MO (Memorial Airport) (0600–2100 Lcl) (by COU)
BRL	Burlington, IA (Burlington Airport)
GBG	Galesburg, IL (by RBL)
DEC	Decatur, IL (Decatur Airport)
CMI	Champaign, IL (University of Illinois Airport) (by DEC)
MTO	Mattoon, IL (Coles County Airport) (by DEC)
DNV	Danville, IL (Vermillion County Airport) (0700–1900 Lcl) (by DEC)
BMI	Bloomington, IL (Bloomington/Normal Airport) (0700–1900 Lcl) (by DEC)
CGI	Cape Girardeau, MO (Cape Girardeau Airport)
MDH	Carbondale, IL (by CGI)
MWA	Marion, IL (Williamson County Airport) (0600–2200 Lcl) (by CGI)
STL	St. Louis, MO (Lambert Field-St. Louis Airport)
SUS	St. Louis, MO (Spirit of St. Louis Airport) (0600–2200 LST) (by STL)
ALN	Alton, IL (Civil Memorial Airport) (by STL)
MVN	Mt. Vernon, IL (Mt. Vernon Airport) (by STL)
CPS	East St. Louis, IL (BI State Parks Airport) 0700–1900 Lcl) (by STL)
VIH	Vichy, MO (Vichy Intermediate Field)

294. CIRCUIT 019 (SW80GT6)

EMP	Emporia, KS (Emporia Airport)
CNU	Chanute, KS (Chanute Airport)
ICT	Wichita, KS (Wichita Airport)
HUT	Hutchinson, KS (Hutchinson Airport) (by ICT)
SLN	Salina, KS (Salina Airport)
MHK	Manhattan, KS (Manhattan Airport) (May/Oct 1100–0300Z; Nov/Apr 1200–0400Z
MKC	Kansas City, MO (Kansas City Airport)
MCI	Kansas City, MO (Kansas City Intnl. Airport) (by MKC)
STJ	St. Joseph, MO (Rosecrans Field) (0700–2300 Lcl) (by MKC)
OJC	Olathe, KS (Johnson County Executive Airport) (by MKC 0700–2300 lcl)
IXD	Johnson County Industrial Airport (0700–2300 Lcl) (by MKC)
FOE	Topeka, KS (Forbes Field Airport by MKC)
TOP	Topeka, KS (Philip Billard Airport)
JLN	Joplin, MO (Joplin Airport)
SGF	Springfield, MO (Springfield Airport)

295. CIRCUIT 020 (GT 08002-020)

LIT	Little Rock, AR (Adams Field)
PBF	Pine Bluff, AR (Grider Field)
HOT	Hot Springs, AR (Memorial Airport) (1200–0400Z Summer, 1300–0500Z Winter) (by PBF)
ELD	El Dorado, AR (El Dorado-Goodwin Airport)
FYV	Fayetteville, AR (Drake Field)
HRO	Harrison, AR (Boone County Airport)
DYR	Dyersburg, TN (Dyersburg Airport) (1100–0300 MAY-SEPT 1200–0400 OCT-APR)
JBR	Jonesboro, AR (Jonesboro Airport)
ARG	Walnut Ridge, AR (Walnut Ridge Airport) (by JBR)
MEM	Memphis, TN (Memphis International Airport)
AWM	West Memphis, AR (West Memphis Airport) (0600–2200 Lcl) (by MEM)
UOX	Oxford, MS (University Oxford Airport) (14–17Z, 22–23Z, 00–01Z) (by MEM)
GWO	Greenwood, MS (Greenwood Leflore Airport)
GLH	Greenville, MS (Greenville Airport) (0700–2200 Lcl) (by GWO)

296. CIRCUIT 021 (SW 80GT7)

MLC	McAlester, OK (McAlester Municipal Airport)
ADM	Ardmore, OK (Ardmore Municipal Airport) (by MLC)
DUA	Durant, OK (Southeastern State College) Mon-Fri 08–17 Lcl) (by MLC)
PRX	Paris, TX (Cox Airport) (by DAL)
DAL	Dallas TX (Love Field)
TYR	Tyler, TX (Pounds Field) (by DAL)
FTW	Fort Worth, TX (Meacham Field)
DFW	Dallas/Ft. Worth, TX (Dallas/Ft. Worth Regional Airport) (by FTW)
CLL	College Station, TX (Easterwood Field)
LFK	Lufkin, TX (Angelina County Airport)
OKC	Oklahoma City, OK (Will Rogers World Airport)
WDG	Enid, OK (Enid Woodring Municipal Airport) (06–22 Lcl) (by OKC)
PWA	Wiley Post Airport (By OKC)
TUL	Tulsa, OK (Tulsa International Airport)
BVO	Bartlesville, OK (Phillips Airport) (by TUL)
PNC	Ponca City, OK (Ponca City Airport)

297. CIRCUIT 022 (GT 08002-022)

MCB	McComb, MS (McComb-Pike County Airport)
PIB	Laurel/Hattiesburg, MS (Pine Belt Regional Airport) (06–14 Lcl, 16–22 Lcl) (by MCB)
HEZ	Natchez, MS (Adams County Airport) (Mon-Fri 07–20 Lcl, Sat 09–14 Lcl, Sun 13–20 Lcl) (by MCB)
NEW	New Orleans, LA (Lakefront Airport)
HUM	Houma, LA (by NEW)
LFT	Lafayette, LA (Lafayette Airport)
7R2	Leeville, LA (Gulf Leeville Heliport) (by NEW 06–18 lcl)
7R3	Amelia, LA (Lake Plourde Base Heliport) (by NEW 06–18 lcl)
5R0	East Addition, High Island Area Block 323, 95 NM 130 Deg Rad Scholes VORTAC (SHS) (by LFT 06–18 lcl)
7R4	Intracoastal City, LA (Petroleum Helicopters-Intracoastal City Heliport) (by NEW 06–18 lcl)
19R	Gulf of Mexico, LA (Ship Shoal Area Block 154) (by NEW 06–18 lcl)
TT6	Gulf of Mexico East Cameron Area, Block 272 (06–18 lcl by LFT)
7R8	Gulf of Mexico South Marsh Island, Block 130 (06–18 lcl by LFT)
ESF	Alexandria, LA (Esler Field) (0600–2200 Lcl)
MLU	Monroe, LA (Monroe Municipal Airport)
JAN	Jackson, MS (Thompson Field)
MEI	Meridian, MS (Key Field)
MOB	Mobile, AL (Bates Field)
BFM	Mobile, AL (Mobile Aerospace Airport) (08–19 Lcl) (by MOB)
SHV	Shreveport, LA (Shreveport Airport)

GGG	Longview, TX (Gregg County Airport) (by SHV)
TXK	Texarkana, AR (Texarkana Airport) (by SHV)
GPT	Gulfport, MS (Municipal Airport) (0600–2300 Lcl) (by MOB

298. CIRCUIT 023 (GT 08004-023)

MFE	McAllen, TX (Miller Intn'l Airport)
HRL	Harlingen, TX (Harlingen Municipal Airport) (0500–2200 Lcl. Mon-Fri, 0600–1700 Lcl Sat, 1200–2200 Lcl Sun) (by MFE)
ALI	Alice, TX (Alice International Airport)
COT	Cotulla, TX (Cotulla Airport) (by SAT)
LRD	Laredo, TX (by SAT)
SAT	San Antonio, TX (San Antonio International Airport)
PSX	Palacios, TX (Palacios Airport)
HOU	Houston, TX (William P. Hobby Airport)
IAH	Houston, TX (Intercontinental Airport) (by HOU)
LCH	Lake Charles, LA (Lake Charles Municipal Airport)
28T	Sabine Pass, TX (by LCH)
GLS	Galveston, TX (Galveston Airport) (Amos)
T46	South Brazos Area Block A 70, 28–00 57N 95–52–19W (by GLS).

299. CIRCUIT 024 (GT 08003-024)

ATY	Watertown, SD (Watertown Airport)
HON	Huron, SD (Municipal Airport)
ABR	Aberdeen, SD (Municipal Airport) (06–22 Lcl)
Y22	Lemmon, SD (by ABR)
Y26	Mobridge, SD (by ABR)
JMS	Jamestown, ND (Jamestown Airport)
GFK	Grand Forks, ND (Grand Forks International Airport)
AXN	Alexandria, MN (Alexandria Airport)
RWF	Redwood Falls, MN (Redwood Falls Airport)

300. CIRCUIT 025 (GT 08003-025)

MLS	Miles City, MT (Miles City Airport)
DIK	Dickinson, ND (Dickinson Airport)
MOT	Minot, ND (Minot Intn'l Airport)
PIR	Pierre, SD (Pierre Airport)
RAP	Rapid City, SD (Rapid City Airport)
REJ	Redig, SD (AMOS)
CHB	Chamberlain, SD (AMOS)

301. CIRCUIT 026 (GT 08003-026)

GRI	Grand Island, NE (Grand Island Airport) (by GRI)
EAR	Kearny, NE (Kearny Airport) (MAY-SEPT 1200–0000; OCT-APR 1300–0100Z) (by GRI)
BUB	Burwell, NE (by GRI)
ONL	Oneill, NE (by GRI 0700–2300 Lcl)
LBF	North Platte, NE (Lee Bird Field)
MCK	McCook, NE (McCook Airport) (MAY-SEPT 1200–0000; OCT-APR 1300–0100Z) (by LBF)
BBW	Broken Bow, NE (MAY-SEPT 1200–0000; OCT-APR 1300–0100Z) (by LBF)
ANW	Ainsworth, NE (Ainsworth Airport) (MAY-SEPT 1200–0000: OCT-APR 1300–1100Z) (by LBF)
MHN	Mullen, NE (Mullen Airport) (MAY-SEPT 1200–0000; OCT-APR 1300–0100Z) (by LBF)
6V1	Imperial, NE (1.5 NW of Imperial Airport) (by LBF) (as available)
LXN	Lexington, NE (Lexington Airport) (07–19Z) (by LBF)
OMA	Omaha, NE (Epley Airfield)
HSI	Hastings, NE (Hastings Airport) (MAY-SEPT 1200–0000; OCT-APR 1300–0100Z) (by GRI)
LNK	Lincoln, NE (Lincoln Municipal Airport)
OLU	Columbus, NE (MAY-SEPT 1200–0000; OCT-APR 1300–0100Z) (by LNK)
BIE	Beatrice, NE (Beatrice Airport) (MAY-SEPT 1200–0000; OCT-APR 1300–0100Z) (by LNK)
3FC	Falls City NE (by LNK 0700–1900 Lcl)
FNB	Falls City, NE

302. CIRCUIT 027 (GT 08005-027)

DEN	Denver, CO (Stapleton International Airport)
ASE	Aspen, CO (Sardy Field) (07 to Sunset Lcl) (by DEN)
RIW	Riverton, WY (Riverton Airport) (0700–2200 Lcl) (by DEN)
FNL	Ft. Collins, CO (Loveland)
EGE	Eagle, CO (Eagle International Airport)
LAR	Laramie, WY (General Brees Field)
RWL	Rawlings, WY (Rawlings Airport)
RKS	Rock Springs, WY (Rock Springs Airport)
CPR	Casper, WY (Casper Air Terminal)

WRL	Worland, WY (Worland Airport)
SHR	Sheridan, WY (Sheridan County Airport)
BFF	Scottsbluff, NE (Scottsbluff Airport)
AIA	Alliance, NE (Alliance Airport) (MAY-SEPT 1200–0000; OCT-APR 1300–0100Z) (by BFF)
CDR	Chadron, NE (Chadron Airport)
SNY	Sidney, NE (Sidney Airport)
AKO	Akron, CO (Akron Washington County Airport)

303. CIRCUIT 028 (GT 08003-028)

GCK	Garden City, KS (Garden City Airport)
DHT	Dalhart, TX (Dalhart Airport)
TAD	Trinidad, CO (Las Animas County Airport)
LHX	La Junta, CO (La Junta Airport)
GLD	Goodland, KS (Goodland Airport)
HLC	Hill City, KS (Hill City Airport)
RSL	Russell, KS (Russell Airport)
HYS	Hays, KS (by RSL 1400–2400 GMT)
DDC	Dodge City, KS (Dodge City Airport)

304. CIRCUIT 029 (SW 80GT9)

ABI	Abilene, TX (Abilene Airport)
MAF	Midland, TX (Midland Regional Air Terminal)
LBB	Lubbock, TX (Lubbock Airport)
PVW	Plainview, TX (Hale County Airport) (by LBB)
AMA	Amarillo, TX (Amarillo Air Terminal)
CDS	Childress, TX (Childress Airport)
GAG	Gage, OK (Gage Airport)
HBR	Hobart, OK (Hobart Airport)
CSM	Clinton, OK (Clinton/Sherman Airport) (by HBR)
SPS	Wichita Falls, TX (Sheppard AFB-Wichita Falls Air Terminal)
MWL	Mineral Wells, TX (Mineral Wells Airport)
AUS	Austin, TX (Robert Mueller Airport)
TPL	Temple, TX (Draughon/Miller Airport) (0600–2200 LST) (by AUS)
JCT	Junction, TX (Kimble County Airport) (Amos)

305. CIRCUIT 030 (GT 08004-030)

ROW	Roswell, NM (Roswell Industrial Air Center)
CNM	Carlsbad, NM (Cavern City Air Terminal)
ELP	El Paso, TX (El Paso International Airport)
GDP	Guadalupe Pass, TX (Amos) (by ELP)
DMN	Deming, NM (Deming Airport)
TCS	Truth or Consequences, NM (Truth or Consequences Airport)
ABQ	Albuquerque, NM (Sunport-Kirtland AFB)
SAF	Santa Fe, NM (Santa Fe Airport) (by ABQ)
LAM	Los Alamos, NM (Los Alamos Airport) (01 and each two hours) (by ABQ)
E33	Chama, NM (by ABQ unschedd 0700–2000 Lcl)
LVS	Las Vegas, NM (Las Vegas Airport)
TCC	Tucumcari, NM (Tucumcari Airport)
HOB	Hobbs, NM (Lea County Airport)
INK	Wink, TX (Wink Airport)
MRF	Marfa, TX (Municipal Airport) (Amos) (Ceiling and visibility added at 12, 15, 18, 21, 00Z)

306. CIRCUIT 031 (GT 08003-031)

BZN	Bozeman, MT (Gallatin Field)
DLN	Dillon, MT (0500–1700 plus 2000 2300–0200 Lcl) (by BZN)
BIL	Billings, MT (Billings Airport)
SDY	Sydney, MT (by BIL)
GDV	Glendive, MT (by BIL)
OLF	Wolfpoint, MT (by BIL)
LVM	Livingston, MT (Livingston Airport) 0600–2200 Lcl)
BTM	Butte, MT (Butte Airport)
MSO	Missoula, MT (Johnson-Bell Airport)
3TH	Thompson Falls, MT (by MSO unschedd 0700–1700 Lcl)
CTB	Cut Bank, MT (Cut Bank Airport)
GTF	Great Falls, MT (Great Falls International Airport)
LWT	Lewistown, MT (Lewistown Airport)

307. CIRCUIT 032 (GT 08005-032)

BKE	Baker, OR (Baker Airport)
LGD	La Grande, OR (by BKE)

PSC	Pasco, WA (Tri Cities Airport) (0600–2200 Lcl) (by ALW)
PUW	Pullman, WA (Pullman Airport) (0600–2200 Lcl except Sat.) (by ALW)
RLD	Richland, WA (Richland Airport) (05–08, 11, 12, 15–16, 18–19, 21–23, Lcl Mon-Fri) (05, 08, 12, 16, 19, 22, 23 Lcl Sat-Sun) (by ALW)
IDA	Idaho Falls, ID (Fanning Field)
JAC	Jackson, WY (Jackson Airport) (by IDA)
WYS	West Yellowstone, MT (West Yellowstone State Airport) (June-Sept) (by IDA)
BYI	Burley, ID (Burley Airport)
TWF	Twin Falls, ID (Joslin Airport) (0600–2200 Lcl) (by BYI)
SUN	Haily, ID (Friedman Memorial Sun Valley Airport) (12, 1400–2100Z), 00, 06Z) (by BYI)
BNO	Burns, OR (Muni Arpt RAMOS)

308. CIRCUIT 033 (GT 08005-033)

BCE	Bryce Canyon, UT (Bryce Canyon Intermediate Airport) (0600–2200 plus 2300 0200 0500)
CDC	Cedar City, UT (Cedar City Airport)
SLC	Salt Lake City, UT (Salt Lake City Intn'l Airport)
OGD	Ogden, UT (Ogden Airport) (MAY-SEPT 1200–0400; OCT-APR 1300–0500Z) (by SLC)
EVW	Evanston, WY (Evanston Airport) (by SLC)
U24	Delta, UT (5SW Delta Airport) 1200–0100Z plus 03 06 09) (by SLC)
4HV	Hanksville, UT (00, 01, 03, 06, 09, 1100–1600, 18, 2000–2200Z) (by SLC)
U28	Green River, UT (1 NNE Green River Airport) (00, 03, 12, 18, 21Z) (by SLC)
U67	Roosevelt, UT (2 SW Roosevelt Airport) (00, 06, 12, 18Z) (by SLC)
PUC	Price, UT (Carbon County Airport) (Amos)
GJT	Grand Junction, CO (Walker Field)
1V1	Rifle, CO (At Three Hourly Intervals) (by GJT)
4BL	Blanding, UT (2½ NNW Blanding Airport) (0000 PE6H) (by SLC)
FMN	Farmington, NM (Farmington Airport) port)
GUP	Gallup, NM (Senator Clark Field)

309. CIRCUIT 034 (GT 08005-034)

TPH	Tonopah, NV (Tonopah Airport)
DAG	Daggett, CA (Barstow Daggett Airport)
RNO	Reno, NV (Cannon Intn'l Airport)
U31	Austin, NV (00 06 12 15 18 21Z) (by RNO)
SVE	Susanville, CA (Susanville Airport) (0600–1800 Lcl) (by RNO)
TRK	Truckee, CA (Truckee/Tahoe Airport) (00 16 18 20 22) (by RNO)
BAM	Battle Mountain, NV (Battle Mountain Airport) (1400–0200Z) (by RNO)
OWY	Owyhee, NV (00 03 06 12 15 18 21Z) (by RNO)
LOL	Lovelock, NV (Derby Field)
EKO	Elko, NV (Elko Airport)
ELY	Ely, NV (Ely Airport/Yelland Field)
LAS	Las Vegas, NV (McCarran International Airport)
DRA	Mercury, NV (Desert Rock Airport) (by LAS)

310. CIRCUIT 035 (GT 08006-035)

PHX	Phoenix, AZ (Sky Harbor Airport)
EO3	Show Low, AZ (by PHX)
OE4	Payson, AZ (by PHX)
TUS	Tucson, AZ (Tucson International Airport)
FHU	Fort Huachuca, AZ (Libby AAF) (0600–2200LST Mon-Fri; 0600–1800LST Sat-Sun and Holidays)
YUM	Yuma, AZ (Yuma County Airport)
IPL	Imperial, CA (Imperial County Airport)
BLH	Blythe, CA (Blythe Airport)
PRC	Prescott, AZ (Prescott Airport)
GCN	Grand Canyon, AZ (Grand Canyon National Park) (0700–1700 MST) (by PRC)
DUG	Douglas, AZ (Bisbee-Douglas Airport)

311. CIRCUIT 036 (GT 08006-036)

BLI	Bellingham, WA (Bellingham Airport)
SEA	Seattle, WA (Seattle-Tacoma International Airport) (by SEA)
PAE	Everett, WA (Snohomish County Airport/ Paine Field) (0700–2300 PST) (by SEA)
RNT	Renton, WA (by SEA 0700–2300 Lcl)
BFI	Seattle, WA (Boeing Field International)
TIW	Tacoma, WA (Tacoma Industrial Airport) (by SEA)
CLM	Port Angeles, WA (Fairchild International Airport) (0600–1700 PST) (by SEA)
40M	Omak, WA (0000Z plus each 3 hrs) (by SEA)
PWT	Bremerton, WA (Kitsap County Airport) (by SEA)
TDO	Toledo, WA (Toledo-Winlock Airport) 1300–0500Z MAY-SEPT; 1400–0600Z OCT-APR) (by SEA)
EAT	Wenatchee, WA (Pangborn Airport)
EPH	Ephrata, WA (Ephrata Airport) (0600–2200 LCL)
MWH	Moses Lake, WA (Grant County Airport) (1400/0800) (by EPH)
SFF	Spokane, WA (Felts Field)
SO6	Mullan, ID (0400/1600 plus 1900 2200 0100 Lcl) (by SFF)
S86	Sandpoint, ID (City-County Airport) (by SFF)

312. CIRCUIT 037 (GT 08006-037)

HIO	Hillsboro, OR (Portland/Hillsboro Airport)
3S2	Aurora, OR (Aurora State Arpt by HIO Unschedd)
KLS	Kelso, OR (HIO Unschedd)
TTD	Troutdale, OR (Troutdale Airport) (Amos)
RDM	Redmond, OR (Roberts Field)
LMT	Klamath Falls, OR (Kingsley Field) (by RDM)
S21	Sunrise, OR (by RDM 0500–2000 Lcl)
OTH	North Bend, OR (North Bend Airport)
RBG	Roseburg, OR (Roseburg Municipal Airport) (by OTH)
HQM	Hoquiam, WA (Bowerman Airport)
DLS	The Dalles, OR (The Dalles Airport) (0600–2200 Lcl)

313. CIRCUIT 038 (GT 08006-038)

ACV	Arcata, CA (Arcata Airport)
087	Shelter Cove, CA (00, 12, 15, 18Z) (by ACV)
CEC	Crescent City, CA (Del Norte County Airport) (by CEC May-Oct 1300–0500Z; Nov-Apr 1400–0500Z) (by ACV 0600 0900 1200Z)
RBL	Red Bluff, CA (Red Bluff Airport)
CIC	Chico, CA (Chico Airport) (0700–2000 Lcl) (by RBL)
RDD	Redding, CA (Redding Airport) (0700–2200 Lcl) (by RBL)
BNY	Burney, CA (0700 Lcl) (by RBL)
MYV	Marysville, CA (Yuba County Airport)
SAC	Sacramento, CA (Sacramento Airport)
SMF	Sacramento, CA (Sacramento Metropolitan Airport) (by SAC)
TVL	South Lake Tahoe, CA (Lake Tahoe Airport) (1500–0700Z) (by SAC)
UKI	Ukiah, CA (Ukiah Airport)
STS	Santa Rose, CA (Sonoma County Airport) (0700–2300 Lcl) (by UKI)
SIY	Montague, CA (Siskiyou County Airport) (0600–2100 Lcl) (by RBL 0600–0800 and 1600–2100 Lcl)

314. CIRCUIT 039 (GT 08006-039)

PRB	Paso Robles, CA (Paso Robles-San Luis Obispo County Airport)
SNS	Salinas, CA (Salinas Airport)
MRY	Monterey, CA (Monterey Peninsula Airport) (by SNS)
SFO	San Francisco, CA (San Francisco Intn'l Airport)
OAK	Oakland, CA (Oakland International Airport)
SJC	San Jose, CA (San Jose Municipal Airport) (by OAK)
CCR	Concord, CA (Buchanan Field) (0700–2300 Lcl) (by OAK)
APC	Napa, CA (Napa County Airport) (by OAK)
HWD	Hayward, CA (Hayward Air Terminal) (by OAK)
SCK	Stockton, CA (Stockton Field)

LVK	Livermore, CA (Livermore Municipal Airport) (08–20 Lcl) (by SCK)
MOD	Modesto, CA (Modesto Airport) (by SCK)
FAT	Fresno, CA (Fresno Air Terminal)
VIS	Visalia, CA (Visalia Airport) (0700–1700 Lcl) (by FAT)
WJF	Lancaster, CA (William J. Fox Airport)
PMD	Palmdale, CA (Air Force Plant 42) (0600–2200 Lcl) (by WJF)
BFL	Bakersfield, CA (Meadows Field)

315. CIRCUIT 040 (GT 08006-040)

SAN	San Diego, CA (San Diego Intn'l-Lindberg Airport)
SEE	San Diego, CA (Gillespie Field) (by SAN)
MYF	San Diego, CA (Montgomery Field) (by SAN)
CRQ	Carlsbad, CA (Palomar Airport) (0700–2300 Lcl) (by SAN)
TRM	Thermal, CA (Thermal Airport)
PSP	Palm Springs, CA (Palm Springs Airport) (1400–0600Z) (by TRM)
IPL	Imperial, CA (Imperial County Airport)
ONT	Ontario, CA (Ontario Intn'l Airport)
SBA	Santa Barbara, CA (Santa Barbara Airport)
OXR	Oxnard, CA (Ventura County Airport) 0600–2200 Lcl) (by SBA)

316. CIRCUIT 041 (LCGA 7131) (ALL STATIONS ALASKA)

ANC	Anchorage (International Airport)
ENA	Kenai
HOM	Homer
5BI	Big River Lakes (by HOM)*
ADQ	Kodiak
ORT	Northway
Z12	Tok (by ORT)*
TKA	Talkeetna
PTI	Puntilla (by TKA)*
5HR	Hayes River (by TKA)*
PAQ	Palmer
UMM	Summit (AUTOB)
VDZ	Valdez (Municipal Airport)
VWS	Valdez (City)
5CE	Cape Saint Elias (Amos)
5HN	Cape Hinchinbrook (Amos)
GKN	Gulkana
5PX	Paxson (by GKN)*
5SZ	Slana (by GKN)*
5SO	Snowshoe (by GKN)*
5GN	Tahneta Pass (by GKN)*

* Intermediate Contractor Observation

317. CIRCUIT 042 (LGCA 7132) (ALL STATIONS ALASKA)

Z76	Port Alexander, AK
FAI	Fairbanks (International Airport)
LNI	Lonely Dew Station (by FAI)
5EA	Healy (by FAI)*
CRC	Circle City (by FAI)
MLY	Manley Hot Springs (by FAI)*
FYU	Ft. Yukon (AUTOB)
BIG	Big Delta (Part Time Manned) (AMOS)
TAL	Tanana
BTT	Bettles
WCR	Chandalar Lake (Chandalar Lk. Arpt.) (by BTT)*
BRW	Barrow
PBA	Pt. Barrow
AIN	Wainwright DEW Station (by FAI) UNSKED
PIZ	Pt Lay DEW Station (by FAI) UNSKED
OLI	Oliktok DEW Station (by FAI) UNSKED
SCC	Deadhorse
UMT	Umiat (by SCC)*
PUO	Prudhoe Bay (by SCC)*
BTI	Barter Island
ENN	Nenana

* Intermediate Contractor Observation

318. CIRCUIT 043 (LGCA 7133) (ALL STATIONS ALASKA)

BET	Bethel
KSM	St. Marys (by BET)*
2Z0	Emmonak (by BET)*
ANI	Aniak (0650–1950 OTRW AMOS)
SNP	St. Paul Island
MCG	McGrath
MHM	Minchumina (by MCG)*
RBY	Ruby (by MCG)*
FWL	Farewell (0800–1600 Mon–Fri)
UNK	Unalakleet (0800–1600 Mon–Fri OTRW AUTOB)
OME	Nome
GAM	Gambell (by OME)*
KPC	Port Clarence (by OME)*
OTZ	Kotzebue

* Intermediate Contractor Observation

319. CIRCUIT 044 (LGCA 7134) (ALL STATIONS ALASKA)

CDV	Cordova
JOH	Johnstone Point (by CDV)*
MXY	McCarthy (by CDV)*
CYT	Cape Yakataga (by CDV)*
MDO	Middleton Island (AMOS)
YAK	Yakutat
JNU	Juneau
FIV	Five Finger (by JNU)*
FNR	Funter Bay (by JNU)*
SSR	Sisters Island (by JNU)*
Z49	Hoonah (by JNU)*
GST	Gustavus (by JNU)*
Z26	Haines (by JNU)*
SGY	Skagway (by JNU)*
SIT	Sitka
Z76	Port Alexander (by SIT)*
WRG	Wrangell (by SIT)
AGN	Angoon (by SIT)*
PSG	Petersburg (by SIT)*
ELV	Elfin Cove (by SIT)*
KAE	Kake (by SIT)*
KTN	Ketchikan
9ZO	Klawock, AK (by KTN)
ANN	Annette Island

* Intermediate Contractor Observation

320. CIRCUIT 045 (LGCA 7135)

AKN	King Salmon
Z30	Port Alsworth (by AKN)*
DLG	Dillingham
ILI	Iliamma (0545–2145 OTRW AMOS)
CDB	Cold Bay
CSH	Cape Sarichef (by CDB)*
DUT	Dutch Harbor (by CDB)*
SDP	Sand Point (by CDB)*
SKJ	Sitkinak (by CDB)*
PTH	Port Heiden (OTRW AMOS)*

* Internediate Contractor Observation

321. CIRCUIT 105 (GT 08001-045)

BGM	Binghamton, NY (Broome County Airport)
BID	Block Island, RI (AMOS)
BTV	Burlington, VT (Burlington Airport)
CAR	Caribou, ME (Caribou Airport) (1000–0400Z)
PWM	Portland, ME (Portland City Airport)
MWN	Mt. Washington, NH (by PWM)
6B2	Greenville, ME (by PWM)
9B2	St. Johnsbury, VT (AMOS)
PVD	Providence, RI (Theodore Francis Green) State Arpt)
ORH	Worcester, MA (Worcester Airport) (AMOS)
BDR	Bridgeport, CT (Bridgeport Airport)

322. CIRCUIT 106 (GT 08001-046)

ABE	Allentown, PA (Allentown-Bethlehem-Easton Airport)
ACY	Atlantic City, NJ (NAFEC Atlantic City Airport/Pomona)

323. CIRCUIT 107 (GT 08002-047)

AVL	Asheville, NC (New Asheville Airport)
HSS	Hot Springs, NC (by AVL)
CAE	Columbia, SC (Columbia Metropolitan Airport)
CLT	Charlotte, NC (Douglas Airport)
HAT	Hatteras, NC
ILM	Wilmington, NC (New Hanover County Airport)
GSO	Greensboro, NC (Greensboro-High Point Airport)

324. CIRCUIT 108 (GT 08001-048)

BWI	Baltimore, MD (Baltimore-Washington International Airport)
ILG	Wilmington, DE (New Castle County Airport)
BKW	Beckley, WV (Raleigh County Airport)
LYH	Lynchburg, VA (Preston Glenn Airport) (1100–0000 Lcl)
ORF	Norfolk, VA (Norfolk Airport)

325. CIRCUIT 109 (GT 08001-049)

CAK	Akron, OH (Akron-Canton County Airport)
TOL	Toledo, OH (Express Airport)
ROC	Rochester, NY (Monroe County Airport)
SYR	Syracuse, NY (Clarence E. Hancock Airport)

326. CIRCUIT 110 (GT 08004-050)

CAO	Clayton, NM (Clayton Airport) (AMOS)
SJT	San Angelo, TX (San Angelo Airport-Mathis Field)

327. CIRCUIT 111 (GT 08004-051)

ACT	Waco, TX (Waco Municipal Airport)
FSM	Fort Smith, AR (Fort Smith Airport)
PGO	Rich Mountain, OK (AMOS)

328. CIRCUIT 112 (GT 08004-052)

DRT	Del Rio, TX (Del Rio International Airport)
BRO	Brownsville, TX (Brownsville International Airport)
CRP	Corpus Christi, TX (Corpus Christi Intn'l Airport)
VCT	Victoria, TX (Foster Field)
BPT	Beaumont, TX (Jefferson County Airport)
MSY	New Orleans, LA (Moisant Intl Arpt)
BTR	Baton Rouge, LA (Ryan Field)
BVE	Boothville, LA

329. CIRCUIT 113 (GT 08002-053)

HSV	Huntsville, AL (Huntsville-Madison County Airport)
AQQ	Apalachicola, FL.
TRI	Bristol, TN (Tri-City Airport)
CHA	Chattanooga, TN (Lovell Field)

330. CIRCUIT 114 (GT 08002-054)

AGS	Augusta, GA (Bush Field)
AHN	Athens, GA (Athens Airport)
CSG	Columbus, GA (Muscogee County Airport)
DAB	Daytona Beach, FL
PBI	West Palm Beach, FL (Palm Beach Intn'l. Airport)
CTY	Cross City, FL (Cross City Airport) (AMOS)

331. CIRCUIT 115 (GT 08003-055)

APN	Alpena, MI
FNT	Flint, MI (Bishop Airport)
GRR	Grand Rapids, MI (Kent County Airport)
HTL	Houghton Lake, MI (Roscommon County Airport)
MKG	Muskegon, MI (Muskegon County)
MMO	Marseilles, IL (AMOS)
MSN	Madison, WI (Truax Airport)
SSM	Sault Ste. Marie, MI (Sault Ste. Marie Airport)
P75	Seul Choix Point, MI (AMOS)

332. CIRCUIT 116 (GT 08803-056)

BIS	Bismarck, ND (Bismarck Airport)
DLH	Duluth, MN (Duluth Airport)
FAR	Fargo, ND (Fargo Airport)
FSD	Sioux Falls, SD (Foss Airport)
INL	International Falls, MN (International Falls Airport)
ISN	Williston, ND (Sloulin Field)
STC	St. Cloud, MN (St. Cloud Muni Airport) (1200-0000Z +0300Z)
P11	Devil's Lake, ND (AMOS) (3 Mi East of Airport)
P24	Roseglen, ND (AMOS)
D45	Warroad, MN (AMOS)
P39	Pequot Lakes, MN (AMOS)

333. CIRCUIT 117 (GT 08005-057)

ALS	Alamosa, CO (Alamosa Airport) (1100/0300)
COS	Colorado Springs, CO (Peterson Field)
CNK	Concordia, KS (Blosser Airport)
CYS	Cheyenne, WY (Cheyenne Airport)
LND	Lander, WY (Hunt Field)
OFK	Norfolk, NE (Stefan Memorial Airport)
VTN	Valentine, NE (1200-0100 plus 0300 0600 0900Z)
PUB	Pueblo, CO (Pueblo Memorial Airport)

TOP	Topeka, KS (Phillip Billard Airport)
1K5	Elkhart, KS (Elkhart Municipal Airport) (AMOS)
BPI	Big Piney, WY (AMOS)
COD	Cody, WY (AMOS)
GCC	Gillette, WY (AMOS)
CAG	Craig, CO (Craig Moffat Airport) (AMOS)
P28	Medicine Lodge, KS (AMOS)

334. CIRCUIT 118 (GT 08003-058)

ALO	Waterloo, IA (Ottumwa Industrial Airport)
DBQ	Dubuque, IA (Dubuque Airport) (1000–0500Z)
EVV	Evansville, IN (Dress Memorial Airport)
FOD	Fort Dodge, IA (Fort Dodge Airport) (AMOS)
LEX	Lexington, KY (Blue Grass Airport)
MLI	Moline, IL (Quad-City Airport)
PIA	Peoria, IL (Peoria Airport)
SPI	Springfield, IL (Capitol Airport)
SUX	Sioux City, IA (Sioux City Airport)
P02	Popular Bluff, MO (AMOS)
P35	Spikard, MO (AMOS)

335. CIRCUIT 119 (GT 08006-059)

UIL	Quillayute, WA (Quillayute State Emergency Airport)
AST	Astoria, OR (Clatsop County Airport)
NOW	Port Angeles, WA (Port Angeles CGAS) (1200–0600Z plus iregly avbl 0700–1100Z) (by AST)
OLM	Olympia, WA (Olympia Airport)
SHN	Shelton, WA (Sanderson Field) (by OLM)
SLE	Salem, OR (McNary Field)
EUG	Eugene, OR (Mahlon-Sweet Airport)
SXT	Sexton Summit, OR (Amos)
MFR	Medford, OR (Medford Airport)
SMP	Stampede Pass, WA (AMOS)
YKM	Yakima, WA (Yakima Airport)
GEG	Spokane, WA (Spokane International Airport)
63S	Colville, WA (0000 plus each 6 hr) (by GEG)
PDT	Pendleton, OR (Pendleton Airport)
MEH	Mecham, OR (Amos)

336. CIRCUIT 120 (GT 08006-060)

BLU	Blue Canyon, CA (Blue Canyon Airport) (Amos)
MHS	Mount Shasta, CA (Amos)
SMX	Santa Maria, CA (Santa Maria Public Airport) (1300–0500 May-Sept; 1400–0600 Oct-Apr)
WMC	Winnemucca, NV (Winnemucca Municipal Airport)
87Q	Pt. Piedras Blancas, CA (San Simeon) (AMOS)
P38	Caliente, NV (AMOS)

337. CIRCUIT 121 (GT 08006-061)

BIH	Bishop, CA (Bishop Airport) (1300–0300Z UFN)
SDB	Sandberg, CA (AUTOB)
FLG	Flagstaff, AZ
INW	Winslow, AZ (Winslow Airport) (AUTOB)
PGA	Page, AZ (AMOS)
IGM	Kingman, AZ (Kingman Airport) (Amos)
E74	Safford, AZ (RAMOS)

338. CIRCUIT 122 (GT 08006-062)

MLF	Milford, UT (Milford Airport) (May-Oct 1200–2200; Nov-Apr 1300–2300)
ENV	Wendover, UT (Wendover AFB) (AUTOB)
LWS	Lewiston, ID (Lewiston Airport) 1200–0300Z)
PIH	Pocatello, ID (Pocatello Airport)
SMN	Salmon, ID (1400–2100Z plus 00, 03, 12) (by PIH)
MQM	Monida, MT (1300–1600Z plus 00, 02, 18, 20, 22, 23) (by PIH)
4SV	Strevell, ID (00, 12, 14, 16, 18, 21Z) (by PIH)
WEY	West Yellowstone MT (00 PE H) (by PIH)
GGW	Glasgow, MT (Glasgow Airport)
HVR	Havre, MT (Havre City Airport) (12–03Z)
HLN	Helena, MT (Helena Airport)
FCA	Kalispell, MT (Flathead County Airport)

339. CIRCUIT 215 (1404)

LIH	Lihue, Kauai (Lihue Airport)
BKH	Barking Sands, Kauai (Pacific Missile Range) (17–02Z)
OGG	Kahului, Maui (Kahului Airport)
HKP	Kaanapali, Maui (Kaanapali Airstrip) (by OGG)
HNL	Honolulu, Oahu (Honolulu Airport)
MKK	Molokai (Molokai Airport) (AMOS)
LNY	Lanai (Lanai Airport) (by HNL 16–04 GMT)
ITO	Hilo, Hawaii (General Lyman Field)
KOA	Kailua-Kona, Hawaii (Ke-Ahole Airport) (by ITO)
MUE	Kamuela, Hawaii (Waimea-Kahala Airfield) (by ITO)
HWN	Honolulu, Hawaii (WSO)
HFO	Honolulu, Hawaii (WSFO)

340. SA OBSERVATIONS ENTERED BY FSS/WSFO VIA DEDICATED FDX NON POLLED CIRCUITS

3HT	Harlowton, MT (15–18, 21–01Z) (by GTF WSFO)
4BQ	Broadus, MT (00, 06, 12, 18Z) (by GTF WSFO)
3DU	Drummond, MT 12–00Z Apr-Oct, 13–01Z Nov-Mar) (by GTF WSFO)
PDX	Portland, OR (Portland International Airport) (by PDX WSFO)
CZK	Cascade, OR (Cascade Locks/Stevenson State Airport) 15–01Z at 2 hr intervals) (by PDX WSFO)
4BK	Brookings, OR (12–06Z at 3 hr intervals) (by PDX WSFO)
ONP	Newport, OR (00–21Z at 3 hr intervals) (by PDX WSFO)
4LW	Lakeview, OR (12–06Z at 3 hr intervals) (by PDX WSFO)
MWS	Mt. Wilson, CA (00, 06, 12, 18Z) (by LAX WSFO)
EED	Needles, CA (00 03 06 09 12 13 14 15Z) (by LAX WSFO)
P70	Clines Corner, NM (RAMOS) (by WBC)
P73	Dry Tortugas, FL (RAMOS) (by WBC)
PRT	Point Retreat, AK (RAMOS) (by WBC)
ERO	Eldred Rock, AK (RAMOS) (by WBC)
4DG	Douglas, WY (by CYS)
3OI	Lamoni, IA (by DSM WSFO)
3SE	Spencer, IA (by DSM WSFO)
MLD	Malad City, ID (12–00Z 03 06 09Z) (by BOI WSFO)
GNG	Gooding, ID (Gooding Airport) (15–01Z 03Z) (by BOI WSFO)
S80	Grangeville, ID (00 06 12 18Z) (by BOI WSFO)
PHP	Philip, SD (Philip Airport) (03 06 09 1200–0000 Lcl) (by FSD WSFO)
CZZ	Campo, CA (by SAN)
SDM	San Diego, CA (Brown Field Municipal Airport) (07–23 Lcl) (by SAN)
LAX	Los Angeles, CA (Los Angeles International Airport)
SMO	Santa Monica, CA (Santa Monica Airport) (by LAX)
BUR	Burbank, CA (Hollywood-Burbank Airport) (by LAX)
LGB	Long Beach, CA (Long Beach Airport/Daugherty Field) (by LAX)
BUO	Beaumont, CA (1400–0200Z at two HRLY intervals plus HRLY as required by WX CNDS) (by LAX)
TOA	Torrance, CA (Torrance Airport) (by LAX)
HHR	Hawthorne, CA (Hawthorne Airport) (by LAX)
SNA	Santa Ana, CA (Orange County Airport) (by LAX)
VNY	Van Nuys, CA (Van Nuys Airport) (by LAX)
AVX	Santa Catalina Island, CA (Catalina Airport) (by LAX)
FUL	Fullerton, CA (Fullerton Airport) (by LAX)
EMT	El Monte, CA (El Monte Airport) (1400–0500Z) (by ONT)
RAL	Riverside, CA (Riverside Municipal Airport) (1400–0500Z) (by ONT)
POC	Laverne, CA (Brackett Field) (07–23 Lcl) (by ONT)

CNO	Chino, CA (Chino Airport) (07–22 Lcl) (by ONT)
AK42	Sutton, AK (0645–1645 Lcl) (by MRI)
5WO	Lazy Mountain, AK (0450–0650) (by MRI)
LIC	Limon, CO (by DEN SWFO)
LXV	Leadville, CO (by DEN WSFO)
FCL	Fort Collins, CO (by DEN WSFO)
2V9	Gunnison, CO (3E GUN) (01 03 05 17 19 21 23 Lcl) (by DEN WSFO)
6V8	Montrose, CO (½ NE MTJ) (01 03 05 21 23 Lcl) (by DEN WSFO)
4LJ	Lamar, CO (by DEN WSFO)
4V5	Durango, CO (N DRO) (01 03 05 21 Lcl) (by DEN WSFO)
CV2	Salida, CO (Harriet Alexandria Field) (by DEN WSFO)
SDY	Sidney, MT (Sidney-Richland Municipal Airport) (by DEN)
SKW	Skwentna, AK (0750–1550 and 1950) (by MRI)
SVC	Silver City, NM (Grants County Airport) (by DEN)
GUC	Gunnison, CO (Gunnison County Airport) (06–16 MST) (by DEN)
HDN	Hayden, CO (by DEN)
MTJ	Montrose, CO (06–22 Lcl) (by DEN)
CEZ	Cortez, CO (Cortez Montezuma County Airport) (by DEN)
DRO	Durango, CO (Durango-La Plata County Airport) 06–20 MST) (by DEN)
GDV	Glendive, MO (Glendive Airport) (by DEN)
OLF	Wolf Point, MT (Wolf Point Airport) (by DEN)
3V9	Aspen, CO (Woody Creek) (by DEN)
VEL	Vernal, UT (Vernal Airport) (by DEN)
5WD	Seward, AK (SVC C)
5WT	Whitter, AK (SVC C)
Z22	Willow, AK (0645–1645) (by MRI)
Z00	Chulitna River Lodge, AK (0545 EA ODD HR thru 2345) (by MRI)
BOI	Boise, ID (Boise Air Terminal by BOI WSFO)
ALW	Walla Walla, WA (Walla Walla Airport)

341. SA OBSERVATIONS ENTERED BY AIRLINE VIA DEDICATED FDX NON POLLED ME-SPEED CIRCUIT (GD 09488-603)

BJI	Bemidji, MN (Bemidji Airport)
BKX	Brookings, SD (Brookings Airport)
BRD	Brainerd, MN (Crow Wing County Airport)
CIU	Sault Ste Marie, MI (Chippewa County International Airport)
CWA	Mosinee, WI (Central Wisconsin Airport)
DVL	Devils Lake, ND (Municipal Airport)
ESC	Escanaba, MI (Escanaba Airport)
FRM	Fairmount, MN (Fairmount Airport)
GTR	Columbus, MS (Golden Triangle Regional Airport)
IMT	Iron Mountain, MI (Ford Airport)
IWD	Ironwood, MI (Gogebic County Airport)
JVL	Janesville, WI (Rock County Airport)
MBL	Manistee, MI (Manistee-Blacker Airport)
MHE	Mitchell, SD (Mitchell Airport)
MKT	Mankato, MN (Mankato Airport)
MNM	Menominee, MI (Menominee County Airport)
MTW	Manitowic, WI (Manitowic Airport)
OTG	Worthington, WN (Worthington Airport)
RHI	Rhinelander, WI (Rhinelander-Oneida Co Airport)
TVF	Thief River Falls, MN (Thief River Falls Airport)
YKN	Yankton, SD (Chan Gurney Airport)

342. RAMOS OBSERVATIONS BY DAYTON ADAS

P07	Sanderson, TX
PUC	Price, UT
5I3	Pikeville, KY
P39	Copper Harbor, MI
P68	Eureka, NV
P58	Harbor Beach, MI
JDN	Jordan, MT
P67	Lidgerwood, ND
P61	Grand Marais
P60	Yellowstone, WY

343. RAMOS Observations via satellite to Suitland, Md. SXUS3 KWBC

AKP	Anaktuvuk
ERO	Eldred Rock
IKO	Nikolski
PRT	Point Retreat
SMA	St. Marys
SHG	Shungnak
CDE	Cape Decision
CSP	Cape Spencer

344–355. RESERVED

Section 3. SUPPLEMENTARY AVIATION WEATHER (SW)

356. SW OBSERVATION COLLECTION

Circuit	By	SW	Location
028	GCK	LBL	Liberal, KS (Liberal Airport)
	TCC	CVN	Clovis, NM (Clovis Municipal Airport) (Avbl Iregly)
029	ABI	BWD	Brownwood, TX (Brownwood Airport)
	MAF	HCA	Big Spring, TX (Howard County Airport) (0500–2100 CST)
030	ABQ	ONM	Socorro, NM (Socorro Airport)
	ELP	4CR	Corona, NM
	ABQ	4MY	Moriarty, NM
	ABQ	GNT	Grants, NM (Grants/Milan Airport)
	ABQ	4SL	Cuba, NM
	ELP	LRU	Las Cruces, NM
	ABQ	CAO	Clayton, NM (Clayton Airport)
	ABQ	E23	Taos, NM (6SM Taos Airport)
	RNM	RUI	Ruidoso, NM (Ruidoso Municipal Airport)
033	CDC	U17	Bullfrog, UT
	CDC	SGU	St. George, UT
	SLC	U71	Vernal, UT (2½ NW Vernal Airport)
035	EED	LHU	Lake Havasu, AZ (Lake Havasu Airpark)

357-362. RESERVED

Section 4. RADAR WEATHER REPORT (SD)

363. GENERAL

Individual radar weather reports, identified as SD, are collected by the National Meteorological Center (NMC) Suitland, Maryland. These reports are entered by Weather Service Offices on the Radar Report and Warning Coordination (RAWARC) circuits. NMC also collects radar report bulletins from military reporting locations and Canada.

When normal entry is not possible, SD reports can be entered on Service A circuits upon request by National Weather Service RAWARC entry stations.

364. SCHEDULE

Radar weather reports are transmitted on Service A by WMSC at H+56 to H+00 each hour. These reports are not scheduled transmissions but are given priority handling during this four minute time frame.

365. DISTRIBUTION

Radar weather reports are sent to WMSC by NMC each hour for distribution to area circuits. These reports are received on an unscheduled basis and can be expected to appear during any unscheduled distribution period on area circuits.

Each individual WMSC circuit receives a unique collection based upon their requirements. Circuit distribution lists are filed at circuit control facilities. Chapter 6 outlines all reports available in the WMSC data base.

366-370. RESERVED

Example 2:
ZCZC≡
BOS>TWAMD<≡
BOS SYNS AMD 161808 AVBL<≡≡≡≡
NNNN8V

d. TWEB amendments for routes and synopsis shall have the same format as the original report followed by the contraction "AMD" and date time group. When entered by the Forecast Office to WMSC it will replace the original report in storage.

Example 1:
ZCZC<≡
BOS>SYNS AMD DTG (Text)<≡≡≡≡
NNNN8V

Example 2:
ZCZC<≡
006>TWEB AMD DTG (Text)<≡≡
NNNN8V

NOTE.—All amendments are held in WMSC storage until the schedule release time of its original. Alert Notices are held in WMSC storage for 6 hours.

458. WSFOs AND THE TWEB INDIVIDUAL ROUTES FOR WHICH THEY FORECAST

PWM Portland, Maine 001 PWM-BGR-CAR
002 PWM-BTV
003 BTV-BGR

BOS Boston 005 BOS-LCL VCNTY FCST
006 BOS-PWM
007 BOS-LEB-BTV
008 BOS-ALB
009 BOS-BDL-NYC
010 BOS-HYA-ACK

ALB Albany 013 BTV-MSS-ART-SYR
014 BTV-ALB-NYC
015 ALB-SYR
016 ALB-BGM-ELM

NYC New York 019 NYC-BID-ACK
020 NYC-ELM-BUF
021 NYC-HAR

PHL Philadelphia 025 PHL-LCL VCNTY FCST
026 HAR-LCL VCNTY FCST
027 PHL-DCA
028 ACY-PHL-HAR
029 HAR-IPT-ELM

WBC Washington, D.C. 032 DCA/BAL-LCL VCNTY FCST
033 ORF-SBY-PHL
034 ORF-DCA-HAR
035 DCA-CRW
036 ROA-EKN-PIT
037 DCA-ROA-TRI

RDU Raleigh 041 ILM-EWN-ECG-ORF
042 RDU-RIC-DCA
043 ILM-RDU-ROA
044 AVL-GSO-RDU-ECG
045 CLT-GSO-ROA

CAE Columbia 048 CAE-LCL VCNTY FCST
049 SAV-CHS-CRE-ILM
050 CHS-CAE-SPA-AVL
051 AGS-CAE-FLO-ILM
052 CAE-RDU
053 AND-SPA-CLT
054 CHS-FLO-RDU
055 AGS-CHS

BUF Buffalo 056 BUF-LCL VCNTY FCST
057 BUF-ROC-SYR
058 BUF-ERI-CLE

CLE Cleveland 061 CLE-LCL VCNTY FCST
063 CLE-DTW
064 CLE-CMH-CVG
065 TOL-CLE
066 TOL-DAY-CVG
067 TOL-CMH-HTS
068 DAY-CMH-PIT

PIT Pittsburgh 071 PIT-BFD-BUF
072 CLE-PIT-HAR
073 PIT-DCA

CRW Charleston 076 TRI-CRW-PIT
077 ROA-CRW-HTS-CVG

ATL Atlanta 100 ATL-LCL VCNTY FCST
101 ATL-AGS
102 ATL-TYS
103 ATL-MCN-JAX
104 ATL-AND
105 ATL-BHM
106 JAX-SAV
107 ATL-CSG-MGM
108 ATL-CHA
109-CSG-LCL VCNTY FCST

MIA Miami 111 FMY-EYW
112 JAX-TLH
113 JAX-DAB-PBI-MIA
114 MIA-MYGF-MYNN
115 MIA-EYW
116 MIA-FMY-TPA
117 TPA-CTY-TLH
118 TPA-ORL-DAB

MEM Memphis 123 CHA-TYS-TRI
128 MEM LCL VCNTY FCST
124 TYS-BNA
125 BNA-MEM
126 MEM-BHM
127 BNA-CHA

BHM Birmingham 129 BHM-BNA
130 BHM-MGM
131 BHM-LCL VCNTY FCST
132 BHM-CHA
133 MGM-DHN-TLH
134 MGM-CEW-PNS
135 MGM-MOB
136 BHM-MEI

JAN Jackson 137 JAN-MEM
138 JAN-MEI-MGM
139 MEI-MSY
140 JAN-MSY

MSY New Orleans 141 NEW-LCL VCNTY FCST
142 SHV-LCL VCNTY FCST
143 MOB-TLH
144 MSY-MOB
145 MSY-LCH
146 MSY-SHV
147 SHV-JAN
148 Coastal Waters-PNS-GNI
149 Coastal Waters-GNI-GLS

LIT Little Rock 151 LIT-LCL VCNTY FCST
152 LIT-MEM
153 LIT-SHV
154 LIT-SGF
156 SHV-TXK-FSM
157 LIT-FSM

OKC Oklahoma City 158 OKC-TUL-SGF
159 OKC-ICT
160 ICT-TUL-FSM
163 TUL-MLC-GSW
164 ICT-AMA
165 OKC-AMA

DFW Greater Southwest 168 SHV-HOU
169 DFW-OKC
170 DFW-SHV
171 DFW-HOU
172 DFW-AUS
173 DFW-ABI-MAF
174 DFW-SPS-AMA

SAT San Antonio 176 HOU-LCH
177 HOU-CRP-BRO
178 HOU-AUS
179 SAT-CRP
180 HOU-SAT-DRT
181 AUS-MAF
182 AUS-SAT-LRD
183 BRO-LRD-DRT

LBB Lubbock 184 GCK-AMA
185 AMA-LBB-MAF
186 AMA-TAD
187 MAF-ELP
188 MAF-DRT

ABQ Albuquerque 192 ABQ-AMA
193 ABQ-GUP
194 ABQ-ROW-MAF
195 ABQ-TCS-ELP
196 ELP-TUS
197 ABQ-FMN
198 ABQ-LVS-TAD
199 ABQ-SJN

ARB Ann Arbor 200 DTW-TOL-FWA
201 DTW-SBN-CHI
202 DTW-MKG
203 DTW-MBS
204 TVC-MBS
205 TVC-MKG-SBN
206 TVC-CIU
207 CIU-MNM-GRB
208 CIA-MQT-CMX
209 CMX-AUW
210 CMX-DLH
307 MBS-CIU

MKE 211 MKE-LSE-MSP
212 MKE-OSH-AUW-DLH
213 MKE-OSH-GRB-AUW
214 AUW-EAU-MSP

CHI Chicago 215 CHI-SPI-STL
216 CHI-BRL
217 CHI-MLI
218 CHI-RFD-DBQ-RST
219 CHI-MKE
220 HUF-STL
303 MLI-LCL VCNTY FCST

IND Indianapolis 221 IND-DAY
222 IND-CVG
223 IND-SDF
224 IND-EVV
225 IND-HUF
226 IND-CHI
227 IND-FWA

SCK SDF SEA SFO SGF SHR SHV SJT SLC SLE SMX SPI SPS SSM STC STJ STL SUX SYR TCC TCS TLH TOL TOP TPA TPH TRI TUL TUS TVC TXK TYS UIL VCT VTN WAL WMC YKM YNG YUM ZUN

495. FO22—OPERATIONAL FORECASTS

REPORTING LOCATIONS:

ABE ABI ABQ ABR ACK ACT ACV ACY AGS AHN ALB ALO ALW AMA APN AQQ AST ATL AUS AVL AVP BCE BDL BDR BFD BFF BFL BGM BGR BHM BIH BIL BIS BKW BNA BNO BOI BOS BPT BRL BRO BTR BTV BUF BVE BWI CAE CAK CAO CAR CDC CHA CHS CIR CLE CLT CMH CNK CON COS COU CPR CRP CRW CSG CVG CYS DAB DAG DAL DAY DBQ DCA DDC DEN DFW DLH DMN DRT DSM DTW EAU EKA EKN EKO ELP ELY ENV ERI ESF EUG EVV EWR EYW FAR FAT FCA FLG FMN FMY FNT FSD FSM FWA GAG GEG GGW GLS GJT GLD GRB GRI GRR GSO GSP GTF GWO HAR HAT HBR HLN HON HSV HTL HTS HVR IAD IAH ICT ILG ILM IND INL INW IPT ISN ISP JAN JAX JBR JFK LAL LAN LAS LAX LBB LBF LCH LEX LFK LGA LGB LIT LND LNK LOL LSE LWS LYH MAF MCB MCI MCN MCW MDW MEI MEM MFR MGM MIA MKE MKG MLC MLI MOB MOT MQT MSN MSO MSP MSS MSY OAK OFK OKC OLM OMA ORD ORF ORL OTH PBI PDT PDX PHL PHX PIA PIH PIR PIT PNS POM PSB PUB PVD PWM RAP RBL RDM RDU RFD RIC RKS RNM RNO ROA ROC ROW RSL RST SAC SAN SAT SAV SBA SBN SCK SDF SEA SFO SGF SHR SHV SJT SLC SLE SMX SPI SPS SSM STC STJ STL SUX SYR TCC TCS TLH TOL TOP TPA TPH TRI TUL TUS TVC TXK TYS UIL VCT VTN WAL WMC WLH YEG YKM YNG YPA YQB YQD YQR YQT YUM YVR YWG YYB YYC ZUN HDNG

496. FP1—STATE FORECASTS

REPORTING LOCATIONS:

ABQ ACY ALB ARB ATL BHM BIS BOI BOS BUF BWI CAE CHI CLE CRW CYS DEN DSM FSD FTW GTF ILG IND IPL JAN LAX LBB LIT MEM MIA MKE MSP NEW NYC OKC OMA PDX PHL PHX PIT PWM RDU RIC RNO SAT SDF SEA SFO SLC SNS STL TOP WBC

497. FP3—FORECAST EXPLANATIONS

REPORTING LOCATIONS:

BOI CLE GTF LAX PDX PHX SEA SFO SLC RNO TOP STL SDF IND CHI OMA DSM DEN ARB MKE MSP FSD BIS CYS

498. FP4—CODED CITY FORECASTS

REPORTING LOCATIONS:

ABQ ALB ARB ATL BHM BIS BOI BOS BUF CAE CHI CLE CRW CYS DEN DSM FSD FTW GTF IND JAN LAX LBB LIT MEM MIA MKE MSP NEW NYC OKC OMA PDX PHL PHX PIT PWM RDU RNO SAT SDF SEA SFO SLC STL TOP WBC

499. FP5—ZONE FORECAST

REPORTING LOCATIONS:

BOI BOS CHI CLF CRW CYS DCA FSD GTF LAX MKC MIA MKE MSP NYC OMA PDX PHX PWM RNO SEA SFO SLC WBC

500. FT—AVIATION TERMINAL FORECASTS (ALASKAN—DOMESTIC—HAWAIAN)

REPORTING LOCATIONS:

ABE ABI ABQ ABR ABY ACK ACT ACV ACY ADM ADQ AGC AGS AHN AKN ALB ALI ANC ANN ALO ALS ALW AMA ANB AND AOO APN ART ASE AST ATL ATY AUG AUS AUW AVL AVP AXN

BAB BAF BCE BDL BDR BET BFD BFF BFI BFL BGM BGR BHM BIG BIH BIL BIS BJI BKE BKW BLF BLH BLI BNA BOI BOS BPT BRD BRL BRO BRW BTL BTM BTR BTT BTV BUF BUR BWG BWI BYI BZN

CAE CAK CAR CDB CDC CDR CDS CDV CEC CGI CHA CHO CHS CID CIU CKB CLE CLL CLT CMH CMI CMX CNM CNU CON COS COU CPR CRE CRP CRW CSG CSV CTB CVG CYS

DAB DAG DAL DAN DAY DBQ DCA DDC DEC DEN DET DFW DHN DHT DIK DLG DLH DLS DMN DPA DRA DRT DSM DTW DUG DUJ BYI

EAT EAU ECG EED EGE EKN EKO ELD ELM ELP ELY ENA ENV EPH ERI ESF EUG EVV EWN EWR EYW

FAI FAR FAT FAY FCA FKL FLG FLL FLO FMN FMY FNT FOE FRM FSD FSM FWA FYV

GAG GAL GCK GEG GFK GFL GGG GGW GJT GKN GLD GLS GNV GPT GRB GRI GRR GSO GSP GST GTF GUP GWO

HBR HCA HIB HKY HLG HLN HNL HOB HOM HOT HOU HPN HQM HRL HRO HSV HTS HUF HUL HUT HVN HVR HYA

IAD IAG IAH ICT IDA ILG ILI ILM IND INK INL INT INW IPL IPT ISN ISP ITH ITO

JAC JAN JAX JBR JFK JHW JLN JMS JNU JST JXN

KOA KTN

LAF LAN LAR LAS LAX LBB LBF LCH LEB LEX LFK LFT LGA LGB LGU LIH LIT LMT LND LNK LNS LNY LOL LOZ LRD LSC LSE LUK LVS LWS LWT LYH

MAF MBS MCB MCG MCI MCN MCO MCW MDT MDW MEI MEM MER MFD MFE MFR MGM MGW MIA MIE MIV MKC MKE MKG MKK MKL MLB MIE MLC MLF MLI MLS MLU MOB MOT MPV MQT MRB MRY MSL MSN MSO MSP MSS MSY MUE

OAK OCV OFK OGD OGG OKC OLM OMA OME ONT ORD ORF ORH ORT OTH OTM OTZ OWB

PAH PAQ PBF PBI PDT PDX PFN PHF PHL PHX PIA PIB PIH PIR PIT PKB PLN PNC PNE PNS POU PRB PRC PSB PSC PSG PSP PUB PVD PVU

RAP RBL RDD RDG RDM RDU RFD RIC RIW RKS RNO ROA ROC ROW RSL RST RWI RWL

SAC SAF SAN SAT SAV SBA SBN SBY SCC SCK SDF SEA SFF SFO SGF SGY SHR SHV SIT SJC SJT SLC SLE SLK SLN SMF SMX SNA SNP SNS SPA SPI SPS SSI STJ STL STS SUX SWF SYR

TAL TCC TCL TCS TEB TKA TLH TOL TOP TPA TPH TRI TTD TUL TUS TVC TVL TWF TXK TYR TYS

UCA UIN UKI UNK

VCT VDZ VLD VNY VRB

WJF WMC WRG WRL

YAK YIP YKM YNG YUM

ZZV

501. FT—AVIATION TERMINAL FORECASTS (CANADIAN)

REPORTING LOCATIONS:

FSP NIL UBZ WLG YAM YAW YAY YAZ YBC YBE YBG YBK YBR YBT YCA YCB YCD YCG YCH YCL YCO YDA YDB YDF YDN YED YEG YEU YEV YFB YFC YFS YGA YGM YGP YGQ YGR YGV YGW YGX YGY YHD YHI YHM YHO YHU YHY YHZ YIC YJT YKA YKL YLG YLT YLW YMA YMD YMJ YMM YMO YMT YMV YMX YNA YNM YOD YOJ YOW YOX YPA YPE YPG YPL YPR YPY YQA YQB YQD YQF YQG YGH YQI YQK YQL YQM YQQ YQR YQT YQU YQV YQW YQX YQY YQZ YRB YRI YRL YRQ YRV YSA YSB YSC YSJ YSM YSU YSV YSY YTH YTL YTR YTS YTZ YUB YUC YUL YUN YUR YUV YUW YUX YUY YUZ YVC YVM YVN YVO YVP YVQ YVR YVV YWA YWG YWK YWL YWP YWR YXC YXD YXE YXH YXJ YXL YXR YXS YXT YXU YXX YXY YYB YYC YYD YYE YYF YYG YYJ YYL YYN YYQ YYR YYT YYU YYW YYY YYZ YZD YZE YZF YZH YZP YZS YZT YZU YZV YZX YZY ZUE ZUM

506. FTUS—AVIATION TERMINAL FORECASTS (MILITARY)

REPORTING LOCATIONS:

ADW AEX BAB BSM DLF DOV DYS EDW EFD END FWH GRK HMN HST IAB LSV LTS MCC MCF MER MGE MHR MIB MUO MYR NBE NGP NGU NGC NHK NID NIP NIR NKX NLC NPA NQI NTD NUQ NZJ NZY OAR PAED PAEI PHNA REE RIV RND SBD SKA SKF SUU SZL TCM TIK VBG VCV WRI

503. FT—AVIATION TERMINAL FORECAST (MEXICAN)

REPORTING LOCATIONS:

ACA CEN CJS CUN CUU CZM GDL HMO LAP MAM MEX MID MTY MXL MZT NLD NOG PVR TAM TAP TIJ VER

504. FZ6—MARINE FORECASTS (PACIFIC)

REPORTING LOCATIONS:

LAX PDX SEA SFO

505. FZ6—MARINE FORECASTS (GREAT LAKES)

REPORTING LOCATIONS:

ARB CHI CLE

506. FZ6—MARINE FORECASTS (ATLANTIC AND GULF OF MEXICO)

REPORTING LOCATIONS:

BOS BUF CAE DCA MIA NEW NYC PHL PWM RDU SAT WBC

507. FZ8—MARINE FORECASTS

REPORTING LOCATIONS:

BOS MIA NEW SFO WBC

508. NOUS1—GENOT SERVICE A

REPORTING LOCATIONS:

DUP WMSC KRWA

509. NOUS3—GENOT SERVICE C

REPORTING LOCATIONS:

DUP WMSC KRWA

510. SA—HOURLY AVIATION WEATHER (DOMESTIC)

REPORTING LOCATIONS:

ABE ABI ABQ ABR ABY ACK ACT ACV ACY ADM AGC AGS AHN AIA AKO ALB ALI ALN ALO ALS ALW AMA AMG ANB AND ANW AOO APC APN AQQ ARA ARB ARG ARR ART ASE AST ATL ATW ATY AUG AUO AUS AUW AVX AVP AWM AXN AZO

BAF BAM BBW BCE BDL BDR BED BEH BFD BFF BFI BFL BFM BGM BGR BHB BHM BID BIE BIH BIL BIS BJI BKE BKL BKW BLF BLH BLI BLU BMG BMI BML BNA BNO BNY BOI BOS BOW BPI BPT BRD BRL BRO BTL BTM BTR BTV BUF BUO BUR BVE BVO BVY BWI BWG BYI BZN

CAE CAG CAK CAO CAR CCR CDC CDR CDS CDW CEC CEW CEZ CGF CGI CGX CHA CHO CHS CIC CID CIU CKB CKV CLE CLL CLM CLT CMH CMI CMX CNK CNM CNO CNU COD CON COS COT COU CPR CPS CRE CRP CRQ CRW CSG CSM CSV CTB CTY CVG CWA CXY CYS CZK CZZ

DAB DAG DAL DAN DAY DBQ DCA DDC DEC DEN DET DFW DHN DHT DIK DKX DLH DLN DLS DMN DNV DPA DRA DRO DRT DSM DTD DTF DTW DUA DUG DVL DUJ DYR DXR

EAR EAT EAU ECG EED EEN EGE EKM EKN EKO ELD ELM ELP ELY EMP EMT ENV E03 E74 EPH ERI ESC ESF EUG EVV EVW EWB EWN EWR EYW

FAR FAT FAY FCA FCL FDY FHU FKL FLG FLL FLO FMN FMY FNT FOD FOK FRG FRM FSD FSM FTW FTY FUL FWA FYV

GAD GAG GBG GCC GCK GCN GDP GDV GEG GFK GFL GGG GGW GJT GLD GLH GLS GNG GNV GON GPT GRB GRI GRR GRW GSO GSP GTF GTR GUC GUP GWO

HAT HBR HDN HEZ HFD HGR HHR HIB HIE HIO HKY HLC HLG HLN HOB HON HOT HOU HPN HQM HRL HRO HSI HSP HSS HSV HTL HTS HUE HUL HUM HUT HVN HVR HWD HYA

IAD IAH ICT IDA IGM ILG ILM IMT IND INK INL INT INW IPL IPT IRK ISN ISO ISP ITH IWD IXD

JAC JAN JAX JBR JCT JDN JEF JFK JHW JLN JMS JST JVL JXN

K20

LAF LAM LAN LAR LAS LAX LBB LBE LBF LCH LCI LEB LEX LFK LFT LGA LGB LGC LGD LGU LHX LIC LIT LMT LND LNK LNP LNR LNS LOL LOU LOZ LRD LSE LUK LVK LVM LVS LWB LWM LWS LWT LXN LXV LYH LZZ

MAF MBL MBS MCB MCI MCK MCN MCO MCW MDH MDT MDW MEH MEI MEM MFD MFE MFR MGL MGM MGR MGW MHE MHK MHN MHS MHT MIA MIE MIV MKC MKE MKG MKL MKT MLB MLC MLD MLF MLI MLS MLU MMO MNM MOB MOD MOT MPV MQM MQT MRB MRF MRY MSL MSN MSO MSP MSS MSY MSV MTJ MTO MTW MWA MVN MVY MWC MWH MWL MWN MWS MYV

NEW NOW

OAJ OAK OE4 OFK OGD OGS OJC OKC OLF OLM OLU OMA ONT ONP ORD ORF ORH ORL OSH OSU OTG OTH OTM OWB OWD OWY OXR O2V O87

PAE PAH PBF PBI PDT PDX PFN PGA PGO PHF PHL PHP PHX PIA PIB PIE PNS POC POU PRB PRC PRX PSB PSC PSF PSP PSX PTK PTN PUB PUC PUV PUW PVD PVU PVW PWA PWM PWT P02 P07 P11 P24 P28 P35 P38 P39 P58 P60 P67 P68 P70 P73 P75

RAL RAP RBG RBL RDD RDG RDM RDU RFD RHI RIC RIW RLD RKS RKD RMG RNO ROA ROC ROW RSL RST RUT RWF RWH RWI RWL

SAC SAF SAN SAT SAV SBA SBN SBP SCK SDB SDF SDM SDY SEA SEE SFB SFF SFO SGF SHD SHN SHR SHV SIY SJC SJT SLC SLE SLK SLN SMF SMN SMO SMP SMX SNA SNS SNY SOP SPA SPI SPS SRQ SSI SSM SSU STC STJ STL STS SUN SUS SUX SVC SVE SWF SXT SYR S06 S80 S86

TAD TCC TCL TCS TDO TEB TIW TIX TLH TNT TOA TOL TOP TPA TRK TRL TRI TRM TTD TUL TUP TUS TVC TVF TVL TWF TXK TYR TYS

UCA UIL UIN UKI UOX U24 U28 U31 U67

VCT VEL VIH VIS VLD VNY VRB VSE VTN

WAL WDG WEY WJF WMC WRL WYS

X53

YIP YKM YKN YNG YUM Y26

ZZV

1K5 1V1 2V9 3DU 3HT 30I 3SE 3V9 4BK 4BL 4BQ 4BW 4DG 4HV 4LJ 4LW 4OM 4SV 4V5 5I3 5MK 5R0 6B2 6V1 6V8 7A9 7R2 7R3 7R4 7TB 9R9 63S 87Q 9B2 19R

511. SA—HOURLY AVIATION WEATHER (MEXICAN)

REPORTING LOCATIONS:

ACA CEN CME CPE CTM CUL CUU CVM CZM DGO GDL GYM HMO LAP LMM MEX MID MOV MTY MZT NAU NCG NOG PNT PPE PPR PVR SLP TAM TAP TMN TRC TUX VER

512. SA—HOURLY AVIATION WEATHER (HAWAIIAN)

LIH BKH OGG HKP HNL MKK LNY ITO KOA MUE HWN HFO

513. SA—HOURLY AVIATION WEATHER (MILITARY)

REPORTING LOCATIONS:

ADW AEX AGR

BAB BAD BGS BIX BKF BLV BSM BYH

CBM CEF CHD COF CVS CZZ

DAA DLF DMA DOV DPG DYS

EDW EFD END

FAF FBG FCS FFO FLV FME FMH FOE FRI FSI FTK FWH

GBN GFA GRF GRK GSB GUS GVW

HIF HMN HOP HRT HST

IAB IAG INR

LCK LFI LHW LIZ LRF LSF LSV LST LUF

MCC MCF MER MGE MHR MIB MMT MTC MTN MUO MXF MYR

NAB NAO NBC NBE NBG NBU NCA NCO NEA NEL NFL NGP NGU NGZ NHK NHZ NID NIP NIR NKT NKX NLC NMM NPA NQA NQI NQX NRB NRC NRS NSE NSI NTD NTU NUC NUQ NUW NXX NYG NZC NZJ NZW NZY N5G

OAR OCS OFF OSC OZR

PACZ PAED PAEH PAEI PAFB PAFR PAGA PAIM PALU PAM PASV PASY PATC PATL PBG POB POE PSM 5BR

RCA RUR REE RIV RME RND

SAW SBD SEM SGH SKA SKF SRF SCC SUU SZL SZN

TBN TCM TIK TOI

VAD VBG VCV VOK VPS

WRB WRI

X68 01R

514. SA—HOURLY AVIATION WEATHER (CANADIAN)

REPORTING LOCATIONS:

FSP UVW WAH WAR WBA WBD WBF WBI WBJ WBK WBX WCL WCP WCS WDI WDL WDS WDV WEH WEI WEU WFL

WFJ WFM WFN WFV WGB WGE WGN WGM WGQ WHC WHE WHJ WHL WHT WIK WJA WKC WKG WKY WLB WLH WLO WLX WLY WMW WMP WNI WPF WPN WPZ WRD WRP WSA WSQ WST WTL WUU WUV WUW WVM WVT WXK WYI YAE YAM YAW YAY YAZ YBC YBE YBG YBL YBR YBT YCB YCD YCG YCH YCL YCO YCT YDA YDB YDC YDF YDN YDQ YEC YED YEG YEN YEO YET YEV YFC YFO YFR YFE YGA YGD YGH YGK YGP YGR YGV YGW YGX YHB YHD YHE YHM YHU YHY YHZ YIB YIX YJT YKA YKF YKL YLD YLJ YLL YLW YMA YMJ YMM YMO YMT YMV YNE YNM YOC YOC YOJ YOW YPA YPB YPE YPG YPH YPQ YPR YPW YPY YQA YQB YQD YQF YQG YQH YQI YQK YQL YQM YQQ YQR YQT YQU YQV YQW YQX YQY YQZ YRB YRJ YRL YRM YRQ YRV YSB YSC YSJ YSM YSN YSU YSY YTH YTL YTR YTS YTW YTZ YUI YUK YUL YUR YUS YUX YUY YUZ YVC YVG YVN YVO YVP YVQ YVR YVV YWA YWG YWK YWL YWR YWY YXC YXD YXE YXH YXI YXJ YXL YXQ YXR YXS YXT YXU YXX YXY YXZ YYB YYC YYD YYE YYF YYG YYJ YYL YYN YYQ YYR YYT YYU YYW YYY YYZ YZD YZE YZF YZH YZP YZR YZS YZT YZU YZV YZW YZX YZY ZPC ZUE ZUM

515. SA—HOURLY AVIATION WEATHER (ALASKAN)

REPORTING LOCATIONS:

ADK ADQ AGN AIN AK42 AKN ANC ANI ANN ATU BET BIG BRW BTI BTT CDB CDV CRC CSH CYT DLG DUT ELV ENA ENN FAI FIV FNR FWL FYU GAM GKN GST HOM ILI JNU JOH KAE KPC KSM KTN LNI MCG MDO MHM MLY MRI MXY OLI OME ORT OTZ PAQ PIZ PSG PTH PTI PUO RBY SCC SDP SGY SIT SKJ SKW SNP SSR TAL TKA UMN UMT UNK VDZ VWS WCR WRG YAK Z00 Z12 Z20 Z22 Z26 Z27 Z30 Z49 Z76 5BI 5CE 5EA 5HN 5HR 5GN 5PX 5SO 5WD 5WO 5WT

516. SD—RADAR WEATHER REPORT

REPORTING LOCATIONS:

ALB ALO AMA APN AQQ ATL AUS AYS BAD BDL BFF BFS BGM BGS BIS BLV BNA BOS BRO BTR BUF BYH CAE CAK CHH CHS CKL CLE CMH CNK COS COU CRP CVG CYS DAB DLF DLH DSM DTW EEW EVV EYW FAR FEW FFO FNT FSD FSM FWA FWH GK GFA GGG GLD GLS GRI GSB GVW HAT HDO HMN HON HST HSV HTL IAB ICT ILM IND ISN JAN LBB LBF LCH LIC LIZ LRF MAF MCF MCI MCN MEI MFR MGE MIA MIB MKC MKG MLI MMO MOB MSN MSO MSP MTC MXF NHK NHZ NPA NQA NYC OFF OFK OKC ORH OSC PAM PBG PIT PMD POB RAP RCA RDR RDU RME RND RST SAC SAW SDF SEM SEP SHV SIL SJT SPS STL TBW TIK TOP TRI TUL UMN VCT WRI XNK ZAB ZLC ZSE1M1 3NO 7VM

517. SI—SYNOPTIC SURFACE REPORTS—INTERMEDIATE

REPORTING LOCATIONS:

NNCR 72349 72402 72433 72599 72613 72648 72650 72676 72683 72695 72741 72743 72755 72789 72798 74494

518. SM—SYNOPTIC SURFACE REPORTS—MAIN

REPORTING LOCATIONS:

70026 70086 70133 70200 70219 70231 70261 70273 70308 70316 70326 70350 70361 70398 70454 72201 72202 72203 72205 72206 72207 72208 72211 72214 72217 72218 72219 72223 72226 72228 72231 72234 72235 72240 72242 72243 72248 72250 72251 72253 72254 72255 72256 72259 72261 72263 72265 72266 72267 72268 72270 72274 72278 72280 72290 72295 72304 72306 72308 72310 72311 72312 72314 72315 72317 72324 72326 72327 72334 72340 72344 72348 72349 72351 72353 72356 72363 72365 72374 72384 72386 72389 72395 72401 72402 72403 72405 72406 72407 72408 72410 72411 72412 72414 72421 72422 72423 72425 72428 72429 72432 72433 72434 72438 72439 72440 72445 72446 72450 72451 72456 72458 72464 72465 72469 72476 72486 72488 72492

72494 72503 72504 72507 72508 72509 72513 72515 72517 72518 72519 72520 72521 72523 72524 72525 72528 72529 72530 72532 72533 72534 72535 72536 72537 72544 72546 72547 72552 72553 72556 72557 72562 72564 72569 72570 72572 72576 72578 72583 72591 72594 72597 72599 72605 72608 72608 72612 72613 72614 72615 72616 72617 72618 72635 72637 72638 72640 72641 72644 72645 72648 72650 72651 72652 72654 72655 72658 72659 72662 72666 72676 72677 72681 72683 72688 72693 72694 72698 72712 72734 72741 72743 72745 72747 72753 72755 72764 72768 72772 72773 72775 72777 72779 72781 72784 72785 72789 72791 72793 72797 74465 74483 74484 74486 74494 74595 74798 78016

519. SR1—CROP REGION, RIVER, CORN AND WHEAT, FRUIT SERVICE, FIRE WEATHER, AND HORTICULTURAL REPORTS

a. *EASTERN REPORTING LOCATIONS:*

ACT AGC AGS ALB ATL AUS AVL BGM BNA BRO BTV BUF CAE CLE CMH CNK CON CRP CRW CVG DCA DDC DFW DLH DRT DSM ESC EVV FWA GRB GRR HAR HON HOU ICT IND JAN LAN LCH LIT LSE MCN MEM MGM MKC MKE MKG MLI MOB MSP MSY OFK OKC OMA OSW PNF PUB RDU ROC SAT SDF SHV STL SUX TOL TOP TTN TUL TYS

b. *WESTERN REPORTING LOCATIONS:*

ABQ AST BIL BIS BOI CYS DEN ELP FAR FAT FCA GEG GGW GJT GTF HLN HVR LAX LWS MFR MSO SAC SLC

520. SW—SUPPLEMENTARY AVIATION WEATHER

REPORTING LOCATIONS:

BKX BMI BWD CAO CPS CVN DNV E23 FOD GNT HCA IYK LBL LHU LRU LWS MDH MEV MTO MVN N40 ONM PKV PQI PSF PSK PWT RUI RWI SGU TTN U17 U71 3OI 3SE 3TH 4CR 4GB 4MY 5B6

521. SX—DEGREE—DAY REPORT

REPORTING LOCATIONS:

ABQ ALB ATL BHM BIS BOI BOS BUF CAE CHI CLE CRW CYS DCA DEN DSM DTW FSD FTW GTF IND JAN LAX LBB LIT LOU MEM MIA MKC MKE MSP MSY NYC OKC OMA PDX PHL PHX PIT PWM RDU SAT SDF SEA SFD SFO SLC STL TOP

522. SYNS—TRANSCRIBED WEATHER BROADCAST SYNOPSES

REPORTING LOCATIONS:

ABQ ALB ARB ATL BHM BIS BOI BOS BUF CAE CHI CLE CRW CYS DEN DFW FSD GTF IND JAN LAX LBB LIT MEM MIA MKE MSP MSY NYC OKC OMA PDX PHL PHX PIT PWM RDU RNO SAT SDF SEA SFO SLC STL TOP WBC

523. TWAMD—TRANSCRIBED WEATHER REPORTS

REPORTING LOCATIONS:

See (SYNS) list.

524. TWEB—TRANSCRIBED WEATHER BROADCAST

REPORTING LOCATIONS:

001 002 003 004 005 006 007 008 009 010 011 012 013 014 015 016 017 018 019 020 021 022 023 024 025 026 027 028 029 030 031 032 033 034 035 036 037 038 039 040 041 042 043 044 045 046 047 048 049 050 051 052 053 054 055 056 057 058 059 060 061 062 063 064 065 066 067 068 069 070 071 072 073 074 075 076 077 078 079 080 081 082 083 100 101 102 103 104 105 106 107 108 190 110 111 112 113 114 115 116 117 118 119 120 121 122 123 124 125 126 127 128 129 130 131 132 133 134 135 136 137 138 139 140 141 142 143 144 145 146 147 148 149 150 151 152 153 154 155 156 157 158 159 160 161 162 163 164 165 166 167 168 169 170 171 172 173 174 175 176 177 178 179 180 181 182 183 184 185 186 187 188 189 190 191 192 193 194 195 196 197 198 199 200 201 202 203 204 205 206 207 208 209 210 211 212 213 214 215 216 217 218 219 220 221 222 223 224 225 226 227 228 229 230 231 232 233 234 235 236 237 238 239 240 241 242 243 244 245 246 247 248 249 250 251 252 253 254 255 256 257 258 259 260 261 262 263 264 265 266 267 268 269 270 271 272 273 274 275 276 277 278 279 280 281 282 283 284 285 286 287 288 289 290 291 292 293 294 295 296 297 298 320 321 322 323 324 325 326 327 328 329 330 331 332 333 334 335 336 337 338 339 340 341 342 343 344 345 346 347 348 349 350 351 352 353 354 355 356 357 358 359 360 361 362 363 364 365 366 367 368 369 370 371 372 373 374 375 376 380 381 382 383 384 385 386 390 391 392 393 394 395 396 397 398 399 403 404 405 406 410 411 412 413 414 415 416 417 418 419 420 421 422 423 424 425 426 427 428 429 430 431 432 433 434

Section 4. WEATHER COLLECTIVES (USE RC PROCEDURES)

581. WMSC DATA BASE

AAAK36 KWBC
AAPA38 KWBC
AAUS30 KWBC
AAUS31 KWBC
AAUS32 KWBC
AAUS33 KWBC
AAUS34 KWBC
AAUS35 KWBC
AAWMS TEST
ABAK1 PANC
ABAK2 PANC
ABCA1 KMIA
ABCA20 KMIA
ABUS1 KWBC
ABUS11 KWBC
ABUS12 KWBC
ABUS13 KWBC
ABUS14 KWBC
ABUS15 KWBC
ABUS2 KWBC
ABUS23 KWBC
ABUS24 KWBC
ABUS25 KWBC
ABUS26 KWBC
ABUS3 KWBC
ABUS4 KWBC
ABUS6 KWBC
ABXX7 KWBC
ABXX11 KMIA
ABXX11 KSFO
ABXX11 PHNL
ABXX15 KMIA
ABXX15 KSFO
ABXX15 PHNL
ABXX13 KWBC
ABXX5 KWBC
ABXX6 KWBC
ACUS KGWC
ADMN PADK
ADMN PANC
ADMN PHNL
ADMN1 KNKA
ADMN1 KWBC
ADMN1 PANC
ADMN1 PHNL
ADMN5 PHNL
ADMN41 PHTO
ADMN41 PHLI
ADMN41 PHOG
AHXN1 KWBC
AHXN2 KWBC
AHXN3 KWBC
AHXN4 KWBC
ARUS40 KABQ
ARUS40 KPMD
ARUS40 KSEA
ARUS40 KSLC
ASAK PANC
ASUS1 KWBC
ASUS10 KMKC
ASXX21 EGRR
AUNA1 KWBC
AUNA2 KWBC
AUOC2 AMMC
AXAC1 NSS
AXCA MJSJ
AXCA20 KMIA
AXUS41 KWBC
AXUS42 KWBC
AXUS43 KWBC
AXUS44 KWBC
AXUS45 KWBC
BIXX KCMC
CIRNOT1
CONT1 KWBC
CSAA1 FASE
CSAA1 SABM
CSAD1 DEMS
CSAF1 EDZW
CSAF2 EDZW
CSAG1 SABM
CSAG2 SABM
CSAK1 PANC
CSAK12 PANC
CSAL1 DAMM
CSAO1 GOOO
CSAO20 GOOO
CSAO21 GOOO
CSAR1 DEMS
CSAR1 OEJD
CSAS1 RJTD
CSAS1 VTBB
CSAU AMMC
CSBA1 MYNN
CSBE MXKF
CSBM1 VBRR
CSBU LZSO
CSBX1 EBBR
CSBY RUMS
CSBZ1 SBBR
CSBZ2 SBBR
CSCA1 MKJP
CSCA1 MACC
CSCA1 MDSD
CSCA1 MFFF
CSCA1 MGGT
CSCA1 MHIC
CSCA1 MHTG
CSCA1 MJSJ
CSCA1 MKPB
CSCA1 MKPO
CSCA1 MKPP
CSCA1 MNMG
CSCA1 MRSJ
CSCA1 MSSS
CSCA1 MZBZ
CSCL1 DEMS
CSCN1 CWTO
CSCO1 MCBO
CSCY1 LCRA
CSCZ1 OKPR
CSDD1 DIPD
CSDL1 EDZW
CSEA1 HKNC
CSEQ1 SEQU
CSFA1 EKMI
CSFG1 MOOO
CSFI1 EFKL
CSFM1 GMMC
CSFR1 LFPW
CSGI1 EGRR
CSGL1 EKMI
CSHK1 VHHH
CSHU1 HABP
CSIE1 EIDB
CSIL1 BIRK
CSIN1 DEMS
CSIR1 OIII
CSIS1 LLBD
CSJP1 RJTD
CSJP2 RJTD
CSKO RKSL
CSKU1 NCRG
CSME1 LIIB
CSME2 LIIB
CSMN MVMR
CSMU1 VHHH
CSMX MXBA
CSNC1 NWWB
CSNL1 EHDB
CSNO11 ENMI
CSNZ1 NZKL
CSOS1 LOWM
CSPA1 PHNL
CSPH1 RPMK
CSPH1 RPMM
CSPK1 OPKC
CSPL1 SOWR
CSPM MBHO
CSPO1 LPPT
CSPR SPIM
CSPS1 NFFN
CSRA1 RJTD
CSRA10 RUHB
CSRA10 RUMS
CSRA10 RUNW
CSRA10 RUTK
CSRO1 YRBK
CSRS1 LIAA
CSRS10 RUMS
CSSA1 MLTM
CSSM1 MEZY
CSSN1 ESWI
CSSP1 LEMM
CSSR1 WSSS
CSSW1 LSZW
CSSY1 OSDI
CSTH1 VTBB
CSTK1 NSAP
CSTS1 DTTA
CSTU1 LTAA
CSUK1 EGRR

CSUR RUMS
CSUY1 SUMU
CSVM1 VVVS
CSVN1 MVBS
CSXX1 CFSP
CSXX1 KWBC
CSXX1 LFPW
CSXX2 KWBC
CSXX3 KWBC
CSXX4 KWBC
CSXX5 KWBC
CSYG1 LYBM
CSZA1 FAPR
CUBE MXKF
CUCA1 MFFF
CUCA1 MFFR
CUFG1 MOOO
CUMX MXBA
CUXX1 KWBC
DFAK1 KWBC
DFCA1 KWBC
DFHW1 KWBC
DFUS1 KWBC
DFXX21 KWBC
FABA20 MYNN
FABZ SBBR
FACA KMIA
FACA MPHO
FACA MMMX
FACA1 MHTG
FACN1 CWHX
FACN1 CWUL
FACN1 CYQX
FACN1 CWVR
FACN1 CYXY
FACN1 CYYZ
FACN1 CWEG
FACN1 CWWG
FACN2 CWUL
FACN2 CWEG
FACN2 CWWG
FACN2 CYQX
FACN3 CWEG
FACN3 CWUL
FACN3 CWWG
FACN4 CWEG
FACN4 CWWG
FACN5 CWEG
FACN5 CWWG
FACN6 CWEG
FACN2 CYXY
FACO MCBO
FAHW PHNL
FANT1 KWBC
FANT2 KWBC
FAPA1 KWBC
FAPR SPIM
FASA20 MKPP
FAUS40 KSLC
FAVN MVMI
FBAG20 SABM
FBAG21 SABM
FBAK1 PANC
FBBZ SBBR
FBBZ SBGL
FBHW PHNL
FBNT1 KWBC
FBNT2 KWBC
FBPA1 KWBC
FBPA2 KWBC
FBPS5 NZAK
FBPS10 NFFN
FBPS11 NFFN
FBPS14 NFFN
FBPS15 NFFN
FCGM PGUM
FCJP7 KAWN
FDAK4 KWBC
FDCA1 KWBC
FDCA2 KWBC
FDCA3 KWBC
FDCA4 KWBC
FDCA5 KWBC
FDCA6 KWBC
FDCN1 KWBC
FDCN2 KWBC
FDCN3 KWBC
FDCN40 KWBC
FDCN41 KWBC
FDCN42 KWBC
FDHW PHNL
FDUS4 KWBC
FDUS5 KWBC
FDUS6 KWBC
FDUS7 KWBC
FEUS40 KWBC
FHPA1 KSFO
FHPA1 PHNL
FHPN KSFO
FJUS47 KGWC
FJUS57 KGWC
FJXN1 KWWA
FKAK1 PAFA
FKAK1 PANC
FKUS1 KWBC
FKUS2 KWBC
FMAK1 KWBC
FMUS41 KWBC
FMUS42 KWBC
FOAK1 PANC
FOAK2 PANC
FOAK3 PANC
FOAK5 PAED
FOAK6 PAED
FOAK7 PAED
FOAK8 PAED
FOHW1 PHNL
FOHW2 PHNL
FOHW3 PHNL
FOUS15 KWBC
FOUS16 KWBC
FOUS17 KWBC
FOUS40 KWBC
FOUS41 KWBC
FOUS42 KWBC
FOUS43 KWBC
FOUS50 KWBC
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FOUS80 KWBC
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FOUS82 KWBC
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FOUS85 KWBC
FOXX2 XXXX
FPAK1 PAFA
FPAK1 PANC
FPAK10 PAFA
FPAK10 PAJN
FPAK11 PADQ
FPAK11 PAFA
FPAK11 PAJN
FPAK11 PANC
FPAK11 PANT
FPAK11 PAOM
FPAK11 PAVD
FPAK12 PAFA
FPAK12 PAJN
FPAK12 PANC
FPAK13 PAFA
FPAK13 PANC
FPAK14 PANC
FPAK15 PANC
FPAK16 PANC
FPAK18 PAFA
FPAK18 PAJN
FPAK18 PANC
FPAK19 PAFA
FPAK19 PAJN
FPAK2 PAFA
FPAK2 PAJN
FPAK2 PANC
FPAK4 PAFA
FPAK4 PAJN
FPAK4 PANC
FPAK5 PAFA
FPAK5 PAJN
FPAK5 PANC
FPAK51 PAFA
FPAK51 PANC
FPAK6 PANC
FPCA1 MJSJ
FPCA10 MJSJ
FPCA20 MJMJ
FPCN11 CWEG

FPCN11 CWUL
FPCN11 CWVR
FPCN11 CWWG
FPCN11 CYXY
FPCN11 CYQR
FPCN11 CYYZ
FPCN12 CWAO
FPCN15 CWWG
FPCN20 CWVR
FPCN22 CWHX
FPHW1 PHNL
FPHW10 PHNL
FPHW2 PHLI
FPHW2 PHNL
FPHW2 PHOG
FPHW2 PHTO
FPHW3 PHNL
FPHW4 PHNL
FPNT20 KWBC
FPPN PGFW
FPPN PHNL
FPUS10 KWBC
FPUS6 KWBC
FPWK PHNL
FPXX MJSJ
FQAK1 PAFA
FQAK1 PAJN
FQAK1 PANC
FQGA40 KWBC
FQGA41 KWBC
FRBZ SBGL
FRNE30 EDZW
FSAK KWBC
FSUS1 KWBC
FSUS2 KWBC
FTAF49 KAWN
FTAG SAEZ
FTAK PADK
FTAK PAED
FTAK PAEI
FTAK2 PAED
FTAK31 PAFA
FTAK31 PANC
FTAS31 VHHH
FTAU31 ASSY
FTAZ LPAZ
FTAZ LPLA
FTBA20 MYNN
FTBE MXKF
FTBE MXXF
FTBO SLLP
FTBX31 EBBR
FTBZ SBBR
FTBZ SBGL
FTBZ SBPA
FTBZ SBSP
FTCA MUGM
FTCA1 MACC
FTCA1 MDSD
FTCA1 MJNR
FTCA1 MKPA
FTCA1 MKPB
FTCA1 MKPL
FTCA1 MZBZ
FTCA20 MFFF
FTCA20 MFFF
FTCA20 MFFR
FTCA20 MKPP
FTCA31 KMIA
FTCA31 MHTG
FTCA32 MHTG
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WWUS9 RWRD
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CHANGE

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Cancellation Date: Retain

SUBJ: CHANGE TO DATA COMMUNICATIONS HANDBOOK

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1. PURPOSE. This change transmits revised pages to the Data Communications Handbook.

2. PRINCIPAL CHANGES.

a. This change includes all service "A" GENOTS through 0/7 except Appendix F (M-59).

b. 4. EXPLANATION OF CHANGES. Added schedule.

c. Editorial changes to paragraphs 337, 338, 340, 457, 458.

d. 393. PREPARATION FOR TRANSMISSION. Format corrected in "a" and "b" of examples for transmission.

e. 581. WMSC DATA BASE. Updated sequence of reports.

3. EFFECTIVE DATE. This change is effective October 1, 1980.

4. PAGE CONTROL CHART. See Attachment 1 for Page Control Chart.

Ramon A. Alvarez
for R. J. VAN VUREN
Director, Air Traffic Service

Distribution: ZAT-712 (ALL)

Initiated By: AAT-420

PAGE CONTROL CHART

REMOVE PAGE	DATED	INSERT PAGE	DATED 10/1/80
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66	1/1/79	66	
67	1/1/79	67	
68	4/1/80	68	
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71	7/1/80	71	
72	1/1/79	72	
77	10/1/79	77	
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86	7/1/79	86	
94	1/1/79	94	
97	7/1/80	97	
100	1/1/79	100	
104	7/1/80	104	
107	4/1/80	107	
115 thru 127	4/1/80	115 thru 127	

Chapter 1. GENERAL

Section 1. INTRODUCTION

1. PURPOSE.

This Handbook prescribes procedures for use by personnel providing communications services.

2. DISTRIBUTION.

This Order is distributed to selected offices in Washington Headquarters, Region Headquarters, Area Offices, FAA Technical Center, and Aeronautical Center. Copies to all Air Traffic Facilities; all International Aviation Field Offices; General Aviation, Air Carrier and Flight Standard District Offices; other Government Agencies; and interested aviation public.

3. CANCELLATIONS.

Flight Services Handbook 7110.10D, Part II and 7 Changes thereto are canceled.

4. EXPLANATION OF CHANGES.

See Attachment 1 for explanation of changes. Changes to this handbook are scheduled for January, April, July and October annually.

5. EFECTIVE DATE.

This handbook is effective January 1, 1979.

Distribution: ZAT-712 (All); AC 45.3 (trng) 1200 cys; FAA 33A, 15; Coast Guard Schd #116; Military Distribution; Army to Ride Req #s65G.

Iniated by: AAT-420

Section 2. SYSTEM DESCRIPTION

6. SCOPE

This Handbook covers the teletypewriter operational procedures used on the Service A and Service B teletypewriter systems, pertinent International Teletypewriter Procedures, and the conterminous U.S. Service A Weather Schedules. Separate handbooks are provided covering Service C and Service O teletypewriter system operations.

7. TERMS OF REFERENCE

Terms of reference or abbreviations used in this part have the following meanings:

Aeronautical Fixed Service (AFS)—Telecommunications service between specified fixed points, provided primarily for the safety of air navigation and for the regular efficient, and economical operation of air services.

Aeronautical Fixed Circuit—Part of the AFS.

Aeronautical Fixed Telecommunications Network (AFTN)—An integrated worldwide system of aeronautical fixed circuits provided, as part of the AFS, for the exchange of messages between the aeronautical fixed stations within the network.

NOTE.—"Integrated" is to be interpreted as a mode of operation necessary to ensure that messages can be transmitted from any aeronautical fixed station within the network to any other aeronautical fixed station within the network.

APULS—Contraction representing the teletypewriter automatic program units, low-speed. On certain circuits, these units start each transmitter distributor in sequence.

Automatic tape relay—A method of communicating whereby messages are received and transmitted in teletypewriter tape form without manual intervention.

Automatic relay installation—A teletypewriter installation where automatic equipment is used to transfer messages from incoming to outgoing circuits.

NOTE.—This term includes both fully-automatic and semi-automatic installation. Semi-automatic equipment requires the assistance of an operator. Fully-automatic equipment does not.

Date-time group—Six digits representing the day of the month and the time from the twenty-four hour clock in that order; e.g., "142215." Date-time groups have no time zone designator and always represent Greenwich Mean Time (GMT).

Notams composed in ICAO ANNEX 15 format contain an 8 digit date-time group. The first two digits represent the day of the month, the second two digits represent the month of the year, the last 4 digits represent the hour and minutes GMT, e.g., 08091710.

International Telegraph Alphabet No. 2 (ITA No. 2)—An internationally accepted system for defining five level Baudot telegraph code by signal number and pulse arrangement. See Appendix C for details and notes relating to FAA use.

Location indicator (ICAO)—A four-letter code group assigned to the location of an aeronautical fixed facility.

Q signals—Signals listed in Appendix F which are authorized for use in teletypewriter and radiotelegraph communications.

Time group—Four digits representing the hour and minutes from the twenty-four hour clock. Time groups without time zone indicators are understood to be GMT; e.g., "0205." A time zone designator is used to indicate local time; e.g., "0205M." The end and beginning of the day are shown by "2400" and "0000," respectively.

Tributary facility—An aeronautical fixed facility that may receive or transmit messages but does not relay except for the purpose of serving similar facilities connected through it to a communications center.

8. ACCEPTABLE MATERIAL

Acceptability is determined at the point where a message enters the FAA system. Process questionable messages and refer them to the Air Traffic Division for future guidance. Accept for transmission on FAA circuits:

221. MESSAGE ACQUISITION

Meteorological information, whether hourly or nonhourly, shall be entered during the times specified in this Handbook. When scheduled data are not available for transmission on time, the contraction DLAD or FINO shall be sent in lieu thereof as appropriate.

222. WMSC CIRCUIT MANAGEMENT

a. The following ATC and NWS locations are designated as data coordinating stations for the indicated circuits:

(1)

001/BOS
002/BDL
003/ALB
004/DUJ
005/HAR
006/CRW
007/ROA
008/RDU
009/JAX
010/MIA
011/DET
012/CLE
013/CHI
014/BNA
015/MGM
016/MSP
017/MKE
018/STL
019/ICT
020/FYV
021/CLL
022/GLS
023/SAT
024/HON
025/RAP
026/OMA
027/DEN
028/GCK
029/ABI
030/ROW
031/BIL
032/BOI
033/GJT
034/LAS
035/PHX
036/SFF
037/PDX
038/SAC
039/OAK
040/SAN
041/GKN
042/BIG
043/OTZ
044/JNU
045/AKN
150 ZCP
151 ZCG
152 ZCK
153 ZCO
154 ZCJ
155 ZCR
156 ZCL
157 ZCT
158 ZCS
159 ZCM
160 ZCD
161 ZCN
162 ZCU
163 ZCB
164 ZCF
165 ZCC
166 ZCA
167 ZCW
168 ZCH
169 ZCI
215/HNL
423/ATL

(2) NWS Eastern Region
105-109 058 061 066 069 077 079
080 081 086 089 090

(3) NWS Southern Region
110-114 054-057 059 065 067-068
078 084-085 091

(4) NWS Central Region
115-118 053 063-064 070-071 073-075
082 092-098

(5) NWS Western Region
119-122 051 060 062 072 076 083
087-088 099

(6) NWS Alaska Region
047-050

(7) NWS Pacific Region
214

Coordinating stations shall notify WMSC of any routine changes desired (not more than five per month) in the scheduled data received on their circuit. Notification shall be made by mail (copies to the Air Traffic Division, ACE-550, and AAT-140) after coordinating a suggested change with all FSSs on the circuit. A majority of stations favoring a change will justify notification to WMSC. Any major data format changes such as presenting data by states shall not be requested more than once a year and such requests shall be forwarded to AAT-140 through the Air Traffic Division. Urgent matters requiring telephone notification shall be processed through the Air Traffic Division who may coordinate through AAT-140.

b. Coordinating stations shall not request data that exceeds the following criteria:

(1) SA—140 U.S. Civil reports including not more than 25 collected on your circuit.

(2) FT—115 U.S. Civil forecasts with no more than 80 scheduled in one hour.

(3) FA—4 U.S. Civil forecasts.

(4) FD—30 U.S. Civil forecasts.

(5) SD—5

(6) UA—50 reporting locations.

(7) Combination SA—20 relayed SW, military, Canadian, Mexican, Alaskan and Hawaiian reports.

(8) Combination Canadian FD and NOTAMs—10.

(9) Combination Mexican FA/UPMX/FT, Canadian FT/FA, and/or Caribbean Bulletin—10.

(10) WH—1.

(11) WST-3.

In addition to above variable data each circuit will receive AC/ASUS, 1/FSUS, all FDC NOTAMs, all distant NOTAMs for each SA received hourly, TWEB amendment notice for material applying to stations on the circuit, GENOTs, CIRNOTs, and WA and WS for FA forecasts selected.

c. NATCOM will issue at least semi-annually in January and July a computer prepared print out listing all data relayed to a specific circuit. A copy will be mailed to the coordinating station.

NOTE.—Paragraph **c** is applicable to only FSS polled Service A area circuits.

223. HANDBOOK AMENDMENTS

Amendments to this aprt of the Handbook will be made by four media:

(1) General Notices (GENOT).

(2) Circuit Notices (CIRNOT).

(3) Page revisions issued at frequent intervals.

(4) Complete Handbook revisions.

a. *Alaska*—Amendments to Weather Schedules contained in AL-7330.1 will be made by RENOT/MET PANC message.

224. CIRCUIT NOTICE (CIRNOT)

a. Whenever changes in procedures or data base occur WMSC will issue an ALCKT CIRNOT. Those containing permanent changes will be coordinated with AAT-100 for later GENOT and/or Handbook 7110.80 page change issuance. Whenever the WMSC suffers a catastrophic failure or loss of specific data an ALCKT CIRNOT will also be issued. The former will be considered cancelled on the receipt of a GENOT or page change, and the latter after restoration of system or specific data.

Examples:

WMSC CIRNOT 4/20
ALCKT
FAMAE (DTG)
DATA BASE CHANGE 7110.80 PARA ETC. OR PROCEDURE CHANGE 7110.80 PARA ETC.
WMSC CIRNOT 4/21
ALCKT
FAMAE (DTG) (TIME OF OUTAGE STARTING OR LOSS OF SPECIFIC DATA)
WMSC DWN UNTIL (DTG) (TIME OF RESTORATION)
NO CURRENT DATA UNTIL (DTG) (ESTIMATED TIME OF DATA REFURBISHMENT)

ALCKT CIRNOTS shall have serial numbers from the first of the year, but all will not necessarily be received on all circuits.

225. USE OF FINO

Whenever a report from an SA location, entered by another location, is not available, the entry station shall enter FINO for the missing report. The WMSC will recognize FINO as a valid report and transmit it to its programmed circuits. Without a report or FINO during distribution of scheduled reports, a circuit could remain idle for up to two minutes while the computer waits for the missing report.

226-235. RESERVED

Section 2. SA OBSERVATION COLLECTION

276. CIRCUIT 001 (GT 08001–001)

AUG Augusta, ME (Augusta Airport)

BHB Bar Harbor, ME (Bar Harbor Airport) (by AUG)

RKD Rockland, ME (Rockland Airport) (by AUG)

HUL Houlton, ME (Houlton Airport)

LEB Lebanon, NH (Lebanon Airport)

VSF Springfield, VT (Springfield State Airport) (by LEB)

BML Berlin (Milan), NH (Berlin Airport) (by LEB)

HIE Whitefield, NH (Whitefield Regional Arpt) (by LEB)

RUT Rutland, VT (Rutland State Airport) (by LEB)

CON Concord, NH (Concord Airport)

MHT Manchester, NH (Grenier Field) (by CON)

EEN Keene, NH (Dillant Hopkins Airport) (Mon-Fri 0700–2000 Lcl, Sat 0700–1400 Lcl, Sun 1100–2000 Lcl) (by CON)

LCI Laconia, NH (Laconia Airport) (by CON)

BOS Boston, MA (Logan Airport)

BED Bedford, MA (Hanscom Field) (0700–2300 Lcl) (by BOS)

ACK Nantucket, MA (Nantucket Memorial Airport) (0600–2300 Lcl) (by BOS)

HYA Hyannis, MA (Barnstable Airport) (0600–2300 Lcl) (by BOS)

EWB New Bedford, MA (New Bedford Airport) (0700–2300 Lcl) (by BOS)

MVY Marthas Vineyard, MA (Marthas Vineyard Airport) (0600–2200 Lcl) (by BOS)

OWD Norwood, MA (Norwood Memorial Airport) (0700–2300 Lcl) (by BOS)

BVY Beverly, MA (Municipal Airport) (0700–2300 Lcl) (by BOS)

FMH Falmouth, MA Otis AFB (Camp Edwards) (by BOS)

LWM Lawrence, MA (Lawrence Muni Arpt) (0800–2000 Lcl) (by BOS)

BGR Bangor, ME (Bangor International Airport)

277. CIRCUIT 002 (GT 08001–002)

ISP Islip, NY (Long Island—MacArthur Airport)

JFK New York, NY (John F. Kennedy Intn'l Arpt) (by ISP)

FRG Farmingdale, NY (Republic Field) (by ISP)

FOK Westhampton Beach, NY (Suffolk County Airport) (07–23 Lcl) (by ISP)

TEB Teterboro, (Bendix, NJ (Teterboro Airport)

MMU Morristown, NJ (by TEB)

EWR Newark, NJ (Newark Airport) (by TEB)

LGA New York, NY (La Guardia Airport) (by TEB)

HPN White Plains, NY (Westchester County Arpt) (by TEB)

CDW Caldwell, NJ (Essex County Airport) (09–17 Lcl) (by TEB)

BDL Windsor Locks, CT (Bradley Field)

BAF Westfield, MA (Barnes Airport) (0700–2300 lcl) (by BDL)

HVN New Haven, CT (New Haven Airport) (1200–0400Z) (by BDL)

GON Groton, CT (Trumbull Field) (by BDL)

HFD Hartford, CT (Hartford/Brainard Airport) (by BDL)

278. CIRCUIT 003 (GT 08001–003)

UCA Utica, NY (Oneida County Airport)

ART Watertown, NY (Watertown Airport)

AVP Avoca, PA (Wilkes-Barre-Scranton Airport)

7TB Tobyhanna, PA (by AVP)

POU Poughkeepsie, NY (Dutchess County Airport)

MSV Monticello, NY (Sullivan County Airport) (by POU)

SWF Newburgh, NY (Stewart Airport) (1100–0300Z) (by POU)

DXR Danbury, CT (Danbury Municipal))0800–2000 Lcl) (by POU)

ALB Albany, NY (Albany County Airport)

PSF	Pittsfield, MA (Pittsfield Airport) (by ALB)
GFL	Glens Falls, NY (Warren County Airport)
MPV	Montpelier, VT (Barre-Montpelier Airport)
MSS	Massena, NY (Richards Airport)
OGS	Ogdensburg, NY (by MSS)
SLK	Saranac Lake, NY (Adirondack Airport) (0600–2100Lcl) (by MSS)

279. CIRCUIT 004 (GT 08001-004)

BFD	Bradford, PA (Bradford Regional Airport)
JHW	Jamestown, NY (Jamestown Airport) (Sun-Fri 0900–2000 Lcl—Sat 1000–2000 Lcl) (by BFD)
DUJ	BuBois, PA (Jefferson County Airport)
PSB	Philipsburg, PA (Philipsburg Airport)
UNV	University Park Airport, PA. (By PSB)
AGC	Pittsburgh, PA (Allegheny County Airport)
PIT	Pittsburgh, (Coraopolis), PA (Greater Pittsburgh Airport) (by AGC)
LBE	Latrobe, PA (Latrobe Airport) (by AGC)
ERI	Erie, PA (Port Erie Airport)
BUF	Buffalo, NY (Buffalo Airport)
ELM	Elmira, NY (Chemung County Airport)
ITH	Ithaca, NY (Tompkins County Airport) (0600–2200 Lcl) (by ELM)
IPT	Williamsport, PA (Williamsport Airport)
AOO	Altoona, Martinsburg, PA (Blair County Airport)
JST	Johnstown, PA (1100–0300Z) (by AOO)

280. CIRCUIT 005 (GT 08001-005)

DCA	Washington, DC (Washington National Airport)
IAD	Chantilly, VA (Dulles International Airport) (by DCA)
CXY	Harrisburg, PA (Capital City Airport) (by HAR)
MDT	Middletown, PA (Harrisburg International Airport/Olmstead Field) (by HAR)
RDG	Reading, PA (General Spaatz Airport) (by HAR)
LNS	Lancaster, PA (Lancaster Airport) (0700–2300 Lcl) (by HAR)
MTN	Baltimore, MD (Glenn L. Martin Airport) (0700–2300 Lcl) (by HAR)
PNE	Philadelphia, PA (North Philadelphia Airport)
PHL	Philadelphia, PA (Philadelphia International Airport) (by PNE)
TTN	Trenton, NJ (Mercer County Airport) (by PNE)
MIV	Millville, NJ (Millville Airport)
SBY	Salisbury, MD (Salisbury Wicomico County Airport)
WAL	Wallops Island, VA (NASA Airport) (0700–1700 Lcl) (by SBY)

281. CIRCUIT 006 (GT 08001-006)

EKN	Elkins, WV (Elkins Municipal-Randolph County Airport) (1030–0230Z)
BLF	Bluefield, WV (Mercer County Airport)
CRW	Charlestown, WV (Kanawaha County Airport)
HTS	Huntington, WV (Tri-State Airport)
PKB	Parkersburg, WV (Wood County Airport)
HLG	Wheeling, WV (Wheeling, Ohio County Airport)
MGW	Morgantown, WV (Morgantown Airport)
CKB	Clarksburg, WV (Benedum Airport) (by MGW)
MRB	Martinsburg, WV (Martinsburg Airport)
HGR	Hagerstown, MD (Hagerstown Airport) (by MRB)

282. CIRCUIT 007 (GT 08001-007)

RWI	Rocky Mount, NC (Rocky Mount/Wilson Airport) (07–22 Lcl)
EWN	New Bern, NC (Simmons-Nott Airport)
OAJ	Jacksonville, NC (Albert J. Ellis Airport) (by EWN)
ISO	Kinston, NC (Kinston Stallings Field) (by EWN)
ROA	Roanoke, VA (Roanoke Municipal Airport)
SSU	White Sulphur Springs, WV (Greenbrier Airport) (08–Sunset) (by ROA)
DAN	Danville, VA (Danville Airport) (0600–2200 LST)
HSP	Hot Springs, VA (Ingalls Field) (0900–1700 Lcl) (by ROA)

LWB	Lewisburg, WV (Greenbrier Valley Airport) (1000–2100 Lcl) (by ROA)
CHO	Charlottesville, VA (Albemarle Airport)
SHD	Staunton, VA (Shenandoah Valley Airport) (0600–2400 LST) (by CHO)
RIC	Richmond, VA (Byrd Field)
PHF	Newport News, VA (Patrick Henry Airport)
ECG	Elizabeth City, NC (Elizabeth City CGAS) (1100–0200Z)

283. CIRCUIT 008 (GT 08002-008)

CHS	Charleston, SC (Charleston AFB/Municipal Airport)
AND	Anderson, SC (Anderson Airport) (07–22 Lcl)
GSP	Greer, SC (Greenville-Spartanburg Airport)
HKY	Hickory, NC (Hickory Airport)
SPA	Spartanburg, SC (Spartanburg Downtown Memorial Airport) 1000–0100Z) (by GSP)
INT	Winston-Salem, NC (Smith-Reynolds Airport) (by GSO)
RDU	Raleigh, NC (Raleigh-Durham Airport)
FAY	Fayetteville, NC (Grannis Airport) (by RDU)
SOP	Southern Pines, NC (Pinehurst/Southern Pines Airport) (by RDU)
FLO	Florence, SC (Florence Airport)
CRE	Crescent Beach, SC (Myrtle Beach Airport) (1300–0100Z)

284. CIRCUIT 009 (GT 08002-009)

AMG	Alma, GA (Bacon County Airport) (1100–0300Z)
JAX	Jacksonville, FL (Jacksonville Intnl Airport)
CRG	Jacksonville, FL (Craig Municipal Airport) (by JAX)
GNV	Gainesville, FL (Gainesville Airport)
TLH	Tallahassee, FL (Municipal Field)
PFN	Panama City, FL (Bay County Airport) (0600–2300 Lcl) (by TLH)
VLD	Valdosta, GA (Valdosta Airport) (07–22 Lcl)
ABY	Albany, GA (Albany Airport)
7A9	Plains, GA (Peterson Airport) (by ABY)
MGR	Moultrie, GA (Moultrie-Thomasville Airport) (0530–1945 Lcl) (by ABY)
MCN	Macon, GA (Macon-Cochran Airport)
SAV	Savannah, GA (Travis Chatham Airport)
SSI	Brunswick (St. Simons Island), GA (McKinnon Airport)

285. CIRCUIT 010 (GT 08002-010)

VRB	Vero Beach, FL (Vero Beach Airport)
MIA	Miami, FL (Miami International Airport)
FLL	Fort Lauderdale, FL (Ft. Lauderdale-Hollywood, Intnl. Airport) (by MIA)
TNT	Miami, FL (Dade-Collier Training and Transition Airport) (Mon-Fri 07–19 Lcl Sat-Sun 07–13 Lcl) (by MIA)
EYW	Key West, FL (International Airport)
FMY	Fort Meyers, FL (Page Field)
X53	Clewiston, FL (Clewiston Airport) (by FMY)
PIE	St. Petersburg, FL (Pinellas County Intnl. Airport)
SRQ	Sarasota, FL (Sarasota-Bradenton Airport) (0600–2400) (by PIE)
BOW	Bartow, FL (Bartow Municipal Airport) (0900–1700 Lcl Mon-Fri plus night as reqd) (by PIE)
MLB	Melbourne, FL (Cape Kennedy Regional Airport)
TIX	Titusville, Fl (Ti-Co Airport) (0800–2100 Lcl) (by MLB)
ORL	Orlando, FL (Orlando Municipal Airport)
MCO	Orlando, FL (McCoy AFB) (by ORL)
SFB	Sanford, FL (by ORL)

286. CIRCUIT 011 (GT 08003-011)

LAN	Lansing, MI (Capital City Airport)
JXN	Jackson, MI (Reynold Field)
MBS	Saginaw, MI (Tri-City Airport)
DET	Detroit, MI (Detroit City Airport)
DTW	Detroit, MI (Detroit Metropolitan Wayne County Arpt) (by DET)
YIP	Detroit, MI (Willow Run Airport) (by DET)
PTK	Pontiac, MI (Pontiac Airport) (0600–2400 Lcl) (by DET)
ARB	Ann Arbor, MI (Municipal Airport) (0800–2000 Lcl) (by DET)

287. CIRCUIT 012 (GT 08001-012)

CMH	Columbus, OH (Port Columbus Airport)
MFD	Mansfield, OH (Mansfield Airport) (by CMH)
OSU	Columbus, OH (Ohio State University Airport) (by CMH)
LUK	Cincinnati, OH (Cincinnati Municipal/ Lunken Field)
CVG	Cincinnati, OH (Greater Cincinnati Airport) (by LUK)
DAY	Dayton, OH (Dayton Airport)
FDY	Findlay, OH (Findlay Airport)
CLE	Cleveland, OH (Cleveland-Hopkins Intnl. Airport)
BKL	Cleveland, OH (Burke-Lake Front Airport) (by CLE)
CGF	Cleveland, OH (Cuyahoga County Airport) (0700–2300) (by CLE)
YNG	Youngstown, OH (Youngstown Airport)
FKL	Franklin, PA (Chess/Lamberton Airport) (by YNG)
ZZV	Zanesville, OH (Zanesville Airport)

288. CIRCUIT 013 (GT 08003-013)

LAF	Lafayette, IN (Purdue University Airport)
IND	Indianapolis, IN (Indianapolis-Weir Cook Airport)
MIE	Muncie, IN (Delaware Co. Airport/Johnson Field) (0700–2300 lcl) (by IND)
BMG	Bloomington, IN (Kister's Airport) (by IND)
HUF	Terre Haute, IN (Hulman Airport)
DPA	West Chicago, IL (Dupage County Airport) (by CHI)
CGX	Chicago, IL (Meigs Field) (by CHI)
MDW	Chicago, IL (Chicago Midway Airport) (CHI)
ORD	Chicago, IL (Chicago O'Hare International Airport) (by CHI)
RFD	Rockford, IL (Greater Rockford Airport)
SBN	South Bend, IN (Michiana Regional Airport)
AZO	Kalamazoo, MI (Kalamazoo Airport) (by SBN)
BTL	Battle Creek, MI (Kellog Airport) (by SBN)
EKM	Elkhart, IN (0600 0000 lcl) (by SBN)
FWA	Ft. Wayne, IN (Baer Field)

289. CIRCUIT 014 (GT 08002-014)

TRI	Bristol, TN (Tri City Airport) (06–22 Lcl)
LNP	Lonesome Pine, VA (Daily 07–07 Lcl two hour intervals) (by TRI)
CSV	Crossville, TN (Crossville Airport)
BNA	Nashville, TN (Nashville Metropolitan Airport)
CKV	Clarksville, TN (Outlaw Field) (Mon-Fri, 0600–2100 Lcl) (Sat 0600–2100 Lcl) (Sun 0900–2100 Lcl) (by BNA)
MKL	Jackson, TN (McKellar Airport)
PAH	Paducah, KY (Barkley Airport)
BWG	Bowling Green, KY (Bowling Green-Warren County Airport)
OWB	Owensboro, KY (Owensboro-Davie County Airport) (1200–0300Z) (by BWG)
SDF	Louisville, KY (Standiford Field) (by LOU)
LOU	Louisville, KY (Bowman Field) (by LOU)
513	Pikeville, KY (by LOU)
LOZ	London, KY (Corbin-London War Memorial Airport)
TYS	Knoxville, TN (McGhee-Tyson Airport)
DKX	Knoxville, KY (Knoxville Downtown Island Airport) (07–22 Lcl) (by TYS)

290. CIRCUIT 015 (GT 08002-015)

MGM	Montgomery, AL (Dannelly Field)
AUO	Auburn, AL (Auburn-Opelika Airport) (0800–1300 Lcl) (by MGM)
CEW	Crestview, FL (Crestview Airport)
PNS	Pensacola, FL (Pensacola Airport)
TCL	Tuscaloosa, AL (Van De Graaff Airport) (07–22 Lcl)
BHM	Birmingham, AL (Birmingham Airport)
MSL	(Muscle Shoals, AL (Muscle Shoals Airport)
TUP	Tupelo, MS (Tupelo Airport) (by MSL)
ANB	Anniston, AL (Anniston/Calhoun County Airport)
GAD	Gadsen, AL (Gadsen Airport) (by ANB)
RMG	Rome, GA (Russell Field) (Amos)
FTY	Atlanta, GA (Fulton County Airport) (by ATL)
ATL	Atlanta, GA (Atlanta Airport)
DHN	Dothan, AL (Dothan Airport)

291. CIRCUIT 016 (GT 08003-016)

MQT	Marquette, MI (Marquette County Airport)
AUW	Wausau, WI (Alexander Airport)
CMX	Houghton, MI (Houghton County Airport)
EAU	Eau Claire, WI (Eau Claire Airport)
GRB	Green Bay, WI (Austin-Straubel Airport)
OSH	Oshkosh, WI (Wittman Field) (0700–2300 LST) (by GRB)
ATW	Appleton, WI (Outagamie Airport) (0700–2300) (by GRB)
HIB	Hibbing, MN (Hibbing Airport)
MSP	Minneapolis, MN (Minneapolis-St. Paul Intnl. Airport)
PLN	Pellston, MI (Emmett County Airport)
TVC	Traverse City, MI (Traverse City Airport)

292. CIRCUIT 017 (GT 08003-017)

LNR	Lone Rock, WI (Tri-County Airport) (0800–1600 Lcl)
CID	Cedar Rapids, IA (Cedar Rapids Airport)
DSM	Des Moines, IA (Des Moines Airport)
LSE	La Crosse, WI (La Crosse Airport)
MCW	Mason City, IA (Mason City Airport)
MKE	Milwaukee, WI (General Mitchell Field)
MWC	Milwaukee, WI (Timmerman Field) (0600–2100 Lcl) (by MKE)
OTM	Ottumwa, IA (Ottumwa Industrial Airport)
RST	Rochester, MN (Rochester Airport)

293. CIRCUIT 018 (GT 08003-018)

UIN	Quincy, IL (Baldwin-Quincy Airport)
COU	Columbia, MO (Columbia Regional Airport)
IRK	Kirksville, MO (Clarence Memorial Airport) (by COU) (0600–2100 plus 0000 and 0300 Lcl)
JEF	Jefferson City, MO (Memorial Airport) (0600–2100 Lcl) (by COU)
BRL	Burlington, IA (Burlington Airport)
GBG	Galesburg, IL (by RBL)
DEC	Decatur, IL (Decatur Airport)
CMI	Champaign, IL (University of Illinois Airport) (by DEC)
MTO	Mattoon, IL (Coles County Airport) (by DEC)
DNV	Danville, IL (Vermillion County Airport) (0700–1900 Lcl) (by DEC)
BMI	Bloomington, IL (Bloomington/Normal Airport) (0700–1900 Lcl) (by DEC)
CGI	Cape Girardeau, MO (Cape Girardeau Airport)
MDH	Carbondale, IL (by CGI)
MWA	Marion, IL (Williamson County Airport) (0600–2200 Lcl) (by CGI)
STL	St. Louis, MO (Lambert Field-St. Louis Airport)
SUS	St. Louis, MO (Spirit of St. Louis Airport) (0600–2200 LST) (by STL)
ALN	Alton, IL (Civil Memorial Airport) (by STL)
MVN	Mt. Vernon, IL (Mt. Vernon Airport) (by STL)
CPS	East St. Louis, IL (BI State Parks Airport) 0700–1900 Lcl) (by STL)
VIH	Vichy, MO (Vichy Intermediate Field)

294. CIRCUIT 019 (SW80GT6)

EMP	Emporia, KS (Emporia Airport)
CNU	Chanute, KS (Chanute Airport)
ICT	Wichita, KS (Wichita Airport)
HUT	Hutchinson, KS (Hutchinson Airport) (by ICT)
SLN	Salina, KS (Salina Airport)
MHK	Manhattan, KS (Manhattan Airport) (May/Oct 1100–0300Z; Nov/Apr 1200–0400Z
MKC	Kansas City, MO (Kansas City Airport)
MCI	Kansas City, MO (Kansas City Intnl. Airport) (by MKC)
STJ	St. Joseph, MO (Rosecrans Field) (0700–2300 Lcl) (by MKC)
OJC	Olathe, KS (Johnson County Executive Airport) (by MKC 0700–2300 lcl)
IXD	Johnson County Industrial Airport (0700–2300 Lcl) (by MKC)
FOE	Topeka, KS (Forbes Field Airport by MKC)
TOP	Topeka, KS (Philip Billard Airport)
JLN	Joplin, MO (Joplin Airport)
SGF	Springfield, MO (Springfield Airport)

295. CIRCUIT 020 (GT 08002-020)

LIT	Little Rock, AR (Adams Field)
PBF	Pine Bluff, AR (Grider Field)
HOT	Hot Springs, AR (Memorial Airport) (1200–0400Z Summer, 1300–0500Z Winter) (by PBF)
ELD	El Dorado, AR (El Dorado-Goodwin Airport)
FYV	Fayetteville, AR (Drake Field)
HRO	Harrison, AR (Boone County Airport)
DYR	Dyersburg, TN (Dyersburg Airport) (1100–0300 MAY-SEPT 1200–0400 OCT-APR)
JBR	Jonesboro, AR (Jonesboro Airport)
ARG	Walnut Ridge, AR (Walnut Ridge Airport) (by JBR)
MEM	Memphis, TN (Memphis International Airport)
AWM	West Memphis, AR (West Memphis Airport) (0600–2200 Lcl) (by MEM)
UOX	Oxford, MS (University Oxford Airport) (14–17Z, 22–23Z, 00–01Z) (by MEM)
GWO	Greenwood, MS (Greenwood Leflore Airport)
GLH	Greenville, MS (Greenville Airport) (0700–2200 Lcl) (by GWO)

296. CIRCUIT 021 (SW 80GT7)

MLC	McAlester, OK (McAlester Municipal Airport)
ADM	Ardmore, OK (Ardmore Municipal Airport) (by MLC)
DUA	Durant, OK (Southeastern State College) Mon-Fri 08–17 Lcl) (by MLC)
PRX	Paris, TX (Cox Airport) (by DAL)
DAL	Dallas TX (Love Field)
TYR	Tyler, TX (Pounds Field) (by DAL)
FTW	Fort Worth, TX (Meacham Field)
DFW	Dallas/Ft. Worth, TX (Dallas/Ft. Worth Regional Airport) (by FTW)
CLL	College Station, TX (Easterwood Field)
LFK	Lufkin, TX (Angelina County Airport)
OKC	Oklahoma City, OK (Will Rogers World Airport)
WDG	Enid, OK (Enid Woodring Municipal Airport) (06–22 Lcl) (by OKC)
PWA	Wiley Post Airport (By OKC)
TUL	Tulsa, OK (Tulsa International Airport)
BVO	Bartlesville, OK (Phillips Airport) (by TUL)
PNC	Ponca City, OK (Ponca City Airport)

297. CIRCUIT 022 (GT 08002-022)

MCB	McComb, MS (McComb-Pike County Airport)
PIB	Laurel/Hattiesburg, MS (Pine Belt Regional Airport) (06–14 Lcl, 16–22 Lcl) (by MCB)
HEZ	Natchez, MS (Adams County Airport) (Mon-Fri 07–20 Lcl, Sat 09–14 Lcl, Sun 13–20 Lcl) (by MCB)
NEW	New Orleans, LA (Lakefront Airport)
HUM	Houma, LA (by NEW)
LFT	Lafayette, LA (Lafayette Airport)
7R2	Leeville, LA (Gulf Leeville Heliport) (by NEW 06–18 lcl)
7R3	Amelia, LA (Lake Plourde Base Heliport) (by LFT 06–18 lcl)
5R0	East Addition, High Island Area Block 323, 95 NM 130 Deg Rad Scholes VORTAC (SHS) (by LFT 06–18 lcl)
7R4	Intracoastal City, LA (Petroleum Helicopters-Intracoastal City Heliport) (by LFT 06–18 lcl)
19R	Gulf of Mexico, LA (Ship Shoal Area Block 154) (by LFT 06–18 lcl)
TT6	Gulf of Mexico East Cameron Area, Block 272 (06–18 lcl by LFT)
7R8	Gulf of Mexico South Marsh Island, Block 130 (06–18 lcl by LFT)
ESF	Alexandria, LA (Esler Field) (0600–2200 Lcl)
MLU	Monroe, LA (Monroe Municipal Airport)
JAN	Jackson, MS (Thompson Field)
MEI	Meridian, MS (Key Field)
MOB	Mobile, AL (Bates Field)
BFM	Mobile, AL (Mobile Aerospace Airport) (08–19 Lcl) (by MOB)
SHV	Shreveport, LA (Shreveport Airport)

GGG	Longview, TX (Gregg County Airport) (by SHV)
TXK	Texarkana, AR (Texarkana Airport) (by SHV)
GPT	Gulfport, MS (Municipal Airport) (0600–2300 Lcl) (by MOB

298. CIRCUIT 023 (GT 08004-023)

MFE	McAllen, TX (Miller Intn'l Airport)
HRL	Harlingen, TX (Harlingen Municipal Airport) (0500–2200 Lcl. Mon-Fri, 0600–1700 Lcl Sat, 1200–2200 Lcl Sun) (by MFE)
ALI	Alice, TX (Alice International Airport)
COT	Cotulla, TX (Cotulla Airport) (by SAT)
LRD	Laredo, TX (by SAT)
SAT	San Antonio, TX (San Antonio International Airport)
PSX	Palacios, TX (Palacios Airport)
HOU	Houston, TX (William P. Hobby Airport)
IAH	Houston, TX (Intercontinental Airport) (by HOU)
LCH	Lake Charles, LA (Lake Charles Municipal Airport)
28T	Sabine Pass, TX (by LCH)
GLS	Galveston, TX (Galveston Airport) (Amos)
T46	South Brazos Area Block A 70, 28–00 57N 95–52–19W (by GLS).

299. CIRCUIT 024 (GT 08003-024)

ATY	Watertown, SD (Watertown Airport)
HON	Huron, SD (Municipal Airport)
ABR	Aberdeen, SD (Municipal Airport) (06–22 Lcl)
Y22	Lemmon, SD (by ABR)
Y26	Mobridge, SD (by ABR)
JMS	Jamestown, ND (Jamestown Airport)
GFK	Grand Forks, ND (Grand Forks International Airport)
AXN	Alexandria, MN (Alexandria Airport)
RWF	Redwood Falls, MN (Redwood Falls Airport)

300. CIRCUIT 025 (GT 08003-025)

MLS	Miles City, MT (Miles City Airport)
DIK	Dickinson, ND (Dickinson Airport)
MOT	Minot, ND (Minot Intn'l Airport)
PIR	Pierre, SD (Pierre Airport)
RAP	Rapid City, SD (Rapid City Airport)
REJ	Redig, SD (AMOS)
CHB	Chamberlain, SD (AMOS)

301. CIRCUIT 026 (GT 08003-026)

GRI	Grand Island, NE (Grand Island Airport) (by GRI)
EAR	Kearny, NE (Kearny Airport) (MAY-SEPT 1200–0000; OCT-APR 1300–0100Z) (by GRI)
K20	Burwell, NE (by GRI)
LBF	North Platte, NE (Lee Bird Field)
MCK	McCook, NE (McCook Airport) (MAY-SEPT 1200–0000; OCT-APR 1300–0100Z) (by LBF)
BBW	Broken Bow, NE (MAY-SEPT 1200–0000; OCT-APR 1300–0100Z) (by LBF)
ANW	Ainsworth, NE (Ainsworth Airport) (MAY-SEPT 1200–0000: OCT-APR 1300–1100Z) (by LBF)
MHN	Mullen, NE (Mullen Airport) (MAY-SEPT 1200–0000; OCT-APR 1300–0100Z) (by LBF)
6V1	Imperial, NE (1.5 NW of Imperial Airport) (by LBF) (as available)
LXN	Lexington, NE (Lexington Airport) (07–19Z) (by LBF)
OMA	Omaha, NE (Epley Airfield)
HSI	Hastings, NE (Hastings Airport) (MAY-SEPT 1200–0000; OCT-APR 1300–0100Z) (by GRI)
LNK	Lincoln, NE (Lincoln Municipal Airport)
OLU	Columbus, NE (MAY-SEPT 1200–0000; OCT-APR 1300–0100Z) (by LNK)
BIE	Beatrice, NE (Beatrice Airport) (MAY-SEPT 1200–0000; OCT-APR 1300–0100Z) (by LNK)

302. CIRCUIT 027 (GT 08005-027)

DEN	Denver, CO (Stapleton International Airport)
ASE	Aspen, CO (Sardy Field) (07 to Sunset Lcl) (by DEN)
RIW	Riverton, WY (Riverton Airport) (0700–2200 Lcl) (by DEN)
EGE	Eagle, CO (Eagle International Airport)
LAR	Laramie, WY (General Brees Field)
RWL	Rawlings, WY (Rawlings Airport)
RKS	Rock Springs, WY (Rock Springs Airport)
CPR	Casper, WY (Casper Air Terminal)

WRL	Worland, WY (Worland Airport)
SHR	Sheridan, WY (Sheridan County Airport)
BFF	Scottsbluff, NE (Scottsbluff Airport)
AIA	Alliance, NE (Alliance Airport) (MAY-SEPT 1200-0000; OCT-APR 1300-0100Z) (by BFF)
CDR	Chadron, NE (Chadron Airport)
SNY	Sidney, NE (Sidney Airport)
AKO	Akron, CO (Akron Washington County Airport)

303. CIRCUIT 028 (GT 08003-028)

GCK	Garden City, KS (Garden City Airport)
DHT	Dalhart, TX (Dalhart Airport)
TAD	Trinidad, CO (Las Animas County Airport)
LHX	La Junta, CO (La Junta Airport)
GLD	Goodland, KS (Goodland Airport)
HLC	Hill City, KS (Hill City Airport)
RSL	Russell, KS (Russell Airport)
DDC	Dodge City, KS (Dodge City Airport)

304. CIRCUIT 029 (SW 80GT9)

ABI	Abilene, TX (Abilene Airport)
MAF	Midland, TX (Midland Regional Air Terminal)
LBB	Lubbock, TX (Lubbock Airport)
PVW	Plainview, TX (Hale County Airport) (by LBB)
AMA	Amarillo, TX (Amarillo Air Terminal)
CDS	Childress, TX (Childress Airport)
GAG	Gage, OK (Gage Airport)
HBR	Hobart, OK (Hobart Airport)
CSM	Clinton, OK (Clinton/Sherman Airport) (by HBR)
SPS	Wichita Falls, TX (Sheppard AFB-Wichita Falls Air Terminal)
MWL	Mineral Wells, TX (Mineral Wells Airport)
AUS	Austin, TX (Robert Mueller Airport)
TPL	Temple, TX (Draughon/Miller Airport) (0600-2200 LST) (by AUS)
JCT	Junction, TX (Kimble County Airport) (Amos)

305. CIRCUIT 030 (GT 08004-030)

ROW	Roswell, NM (Roswell Industrial Air Center)
CNM	Carlsbad, NM (Cavern City Air Terminal) minal
ELP	El Paso, TX (El Paso International Airport)
GDP	Guadalupe Pass, TX (Amos) (by ELP)
DMN	Deming, NM (Deming Airport)
TCS	Truth or Consequences, NM (Truth or Consequences Airport)
ABQ	Albuquerque, NM (Sunport-Kirtland AFB)
SAF	Santa Fe, NM (Santa Fe Airport) (by ABQ)
LAM	Los Alamos, NM (Los Alamos Airport) (01 and each two hours) (by ABQ)
LVS	Las Vegas, NM (Las Vegas Airport)
TCC	Tucumcari, NM (Tucumcari Airport)
HOB	Hobbs, NM (Lea County Airport)
INK	Wink, TX (Wink Airport)
MRF	Marfa, TX (Municipal Airport) (Amos) (Ceiling and visibility added at 12, 15, 18, 21, 00Z)

306. CIRCUIT 031 (GT 08003-031)

BZN	Bozeman, MT (Gallatin Field)
DLN	Dillon, MT (0500-1700 plus 2000 2300-0200 Lcl) (by BZN)
BIL	Billings, MT (Billings Airport)
LVM	Livingston, MT (Livingston Airport) 0600-2200 Lcl)
BTM	Butte, MT (Butte Airport)
MSO	Missoula, MT (Johnson-Bell Airport)
CTB	Cut Bank, MT (Cut Bank Airport)
GTF	Great Falls, MT (Great Falls International Airport)
LWT	Lewistown, MT (Lewistown Airport)

307. CIRCUIT 032 (GT 08005-032)

BKE	Baker, OR (Baker Airport)
LGD	La Grande, OR (by BKE)

325. CIRCUIT 109 (GT 08001-049)

CAK	Akron, OH (Akron-Canton County Airport)
TOL	Toledo, OH (Express Airport)
ROC	Rochester, NY (Monroe County Airport)
SYR	Syracuse, NY (Clarence E. Hancock Airport)

326. CIRCUIT 110 (GT 08004-050)

CAO	Clayton, NM (Clayton Airport) (AMOS)
SJT	San Angelo, TX (San Angelo Airport-Mathis Field)

327. CIRCUIT 111 (GT 08004-051)

ACT	Waco, TX (Waco Municipal Airport)
FSM	Fort Smith, AR (Fort Smith Airport)
PGO	Rich Mountain, OK (AMOS)

328. CIRCUIT 112 (GT 08004-052)

DRT	Del Rio, TX (Del Rio International Airport)
BRO	Brownsville, TX (Brownsville International Airport)
CRP	Corpus Christi, TX (Corpus Christi Intn'l Airport)
VCT	Victoria, TX (Foster Field)
BPT	Beaumont, TX (Jefferson County Airport)
MSY	New Orleans, LA (Moisant Intn'l Airport)
BTR	Baton Rouge, LA (Ryan Field)
BVE	Boothville, LA

329. CIRCUIT 113 (GT 08002-053)

HSV	Huntsville, AL (Huntsville-Madison County Airport)
AQQ	Apalachicola, FL.
TRI	Bristol, TN (Tri-City Airport)
CHA	Chattanooga, TN (Lovell Field)

330. CIRCUIT 114 (GT 08002-054)

AGS	Augusta, GA (Bush Field)
AHN	Athens, GA (Athens Airport)
CSG	Columbus, GA (Muscogee County Airport)
DAB	Daytona Beach, FL
PBI	West Palm Beach, FL (Palm Beach Intn'l. Airport)
CTY	Cross City, FL (Cross City Airport) (AMOS)

331. CIRCUIT 115 (GT 08003-055)

APN	Alpena, MI
FNT	Flint, MI (Bishop Airport)
GRR	Grand Rapids, MI (Kent County Airport)
HTL	Houghton Lake, MI (Roscommon County Airport)
MKG	Muskegon, MI (Muskegon County)
MMO	Marseilles, IL (AMOS)
MSN	Madison, WI (Truax Airport)
SSM	Sault Ste. Marie, MI (Sault Ste. Marie Airport)
P75	Seul Choix Point, MI (AMOS)

332. CIRCUIT 116 (GT 08803-056)

BIS	Bismarck, ND (Bismarck Airport)
DLH	Duluth, MN (Duluth Airport)
FAR	Fargo, ND (Fargo Airport)
FSD	Sioux Falls, SD (Foss Airport)
INL	International Falls, MN (International Falls Airport)
ISN	Williston, ND (Sloulin Field)
STC	St. Cloud, MN (St. Cloud Muni Airport) (1200–0000Z +0300Z)
P11	Devil's Lake, ND (AMOS) (3 Mi East of Airport)
P24	Roseglen, ND (AMOS)
D45	Warroad, MN (AMOS)
P39	Pequot Lakes, MN (AMOS)

333. CIRCUIT 117 (GT 08005-057)

ALS	Alamosa, CO (Alamosa Airport) (1100/0300)
COS	Colorado Springs, CO (Peterson Field)
CNK	Concordia, KS (Blosser Airport)
CYS	Cheyenne, WY (Cheyenne Airport)
LND	Lander, WY (Hunt Field)
OFK	Norfolk, NE (Stefan Memorial Airport)
VTN	Valentine, NE (1200–0100 plus 0300 0600 0900Z)
PUB	Pueblo, CO (Pueblo Memorial Airport)

TOP	Topeka, KS (Phillip Billard Airport)
1K5	Elkhart, KS (Elkhart Municipal Airport) (AMOS)
BPI	Big Piney, WY (AMOS)
COD	Cody, WY (AMOS)
GCC	Gillette, WY (AMOS)
CAG	Craig, CO (Craig Moffat Airport) (AMOS)
P28	Medicine Lodge, KS (AMOS)

334. CIRCUIT 118 (GT 08003-058)

ALO	Waterloo, IA (Ottumwa Industrial Airport)
DBQ	Dubuque, IA (Dubuque Airport) (1000–0500Z)
EVV	Evansville, IN (Dress Memorial Airport)
FOD	Fort Dodge, IA (Fort Dodge Airport) (AMOS)
LEX	Lexington, KY (Blue Grass Airport)
MLI	Moline, IL (Quad-City Airport)
PIA	Peoria, IL (Peoria Airport)
SPI	Springfield, IL (Capitol Airport)
SUX	Sioux City, IA (Sioux City Airport)
P02	Popular Bluff, MO (AMOS)
P35	Spikard, MO (AMOS)

335. CIRCUIT 119 (GT 08006-059)

UIL	Quillayute, WA (Quillayute State Emergency Airport)
AST	Astoria, OR (Clatsop County Airport)
NOW	Port Angeles, WA (Port Angeles CGAS) (1200–0600Z plus iregly avbl 0700–1100Z) (by AST)
OLM	Olympia, WA (Olympia Airport)
SHN	Shelton, WA (Sanderson Field) (by OLM)
SLE	Salem, OR (McNary Field)
EUG	Eugene, OR (Mahlon-Sweet Airport)
SXT	Sexton Summit, OR (Amos)
MFR	Medford, OR (Medford Airport)
SMP	Stampede Pass, WA (AMOS)
YKM	Yakima, WA (Yakima Airport)
GEG	Spokane, WA (Spokane International Airport)
63S	Colville, WA (0000 plus each 6 hr) (by GEG)
PDT	Pendleton, OR (Pendleton Airport)
MEH	Mecham, OR (Amos)

336. CIRCUIT 120 (GT 08006-060)

BLU	Blue Canyon, CA (Blue Canyon Airport) (Amos)
MHS	Mount Shasta, CA (Amos)
SMX	Santa Maria, CA (Santa Maria Public Airport) (1300–0500 May-Sept; 1400–0600 Oct-Apr)
WMC	Winnemucca, NV (Winnemucca Municipal Airport)
87Q	Pt. Piedras Blancas, CA (San Simeon) (AMOS)
P38	Caliente, NV (AMOS)

337. CIRCUIT 121 (GT 08006-061)

BIH	Bishop, CA (Bishop Airport) (1300–0300Z UFN)
SDB	Sandberg, CA (AUTOB)
FLG	Flagstaff, AZ
INW	Winslow, AZ (Winslow Airport) (AUTOB)
PGA	Page, AZ (AMOS)
IGM	Kingman, AZ (Kingman Airport) (Amos)
E74	Safford, AZ (RAMOS)

338. CIRCUIT 122 (GT 08006-062)

MLF	Milford, UT (Milford Airport) (May-Oct 1200–2200; Nov-Apr 1300–2300)
ENV	Wendover, UT (Wendover AFB) (AUTOB)
LWS	Lewiston, ID (Lewiston Airport) 1200–0300Z)
PIH	Pocatello, ID (Pocatello Airport)
SMN	Salmon, ID (1400–2100Z plus 00, 03, 12) (by PIH)
MQM	Monida, MT (1300–1600Z plus 00, 02, 18, 20, 22, 23) (by PIH)
4SV	Strevell, ID (00, 12, 14, 16, 18, 21Z) (by PIH)
WEY	West Yellowstone MT (00 PE H) (by PIH)
GGW	Glasgow, MT (Glasgow Airport)
HVR	Havre, MT (Havre City Airport) (12–03Z)
HLN	Helena, MT (Helena Airport)
FCA	Kalispell, MT (Flathead County Airport)

339. CIRCUIT 215 (1404)

LIH	Lihue, Kauai (Lihue Airport)
BKH	Barking Sands, Kauai (Pacific Missile Range) (17–02Z)
OGG	Kahului, Maui (Kahului Airport)
HKP	Kaanapali, Maui (Kaanapali Airstrip) (by OGG)
HNL	Honolulu, Oahu (Honolulu Airport)
MKK	Molokai (Molokai Airport) (AMOS)
LNY	Lanai (Lanai Airport) (by HNL 16–04 GMT)
ITO	Hilo, Hawaii (General Lyman Field)
KOA	Kailua-Kona, Hawaii (Ke-Ahole Airport) (by ITO)
MUE	Kamuela, Hawaii (Waimea-Kahala Airfield) (by ITO)
HWN	Honolulu, Hawaii (WSO)
HFO	Honolulu, Hawaii (WSFO)

340. SA OBSERVATIONS ENTERED BY FSS/WSFO VIA DEDICATED FDX NON POLLED CIRCUITS

3HT	Harlowton, MT (15–18, 21–01Z) (by GTF WSFO)
4BQ	Broadus, MT (00, 06, 12, 18Z) (by GTF WSFO)
3DU	Drummond, MT 12–00Z Apr-Oct, 13–01Z Nov-Mar) (by GTF WSFO)
PDX	Portland, OR (Portland International Airport) (by PDX WSFO)
CZK	Cascade, OR (Cascade Locks/Stevenson State Airport) 15–01Z at 2 hr intervals) (by PDX WSFO)
4BK	Brookings, OR (12–06Z at 3 hr intervals) (by PDX WSFO)
4BW	Burns, OR (12–03Z) (by PDX WSFO)
ONP	Newport, OR (00–21Z at 3 hr intervals) (by PDX WSFO)
4LW	Lakeview, OR (12–06Z at 3 hr intervals) (by PDX WSFO)
MWS	Mt. Wilson, CA (00, 06, 12, 18Z) (by LAX WSFO)
EED	Needles, CA (00 03 06 09 12 13 14 15Z) (by LAX WSFO)
P70	Clines Corner, NM (RAMOS) (by WBC)
P73	Dry Tortugas, FL (RAMOS) (by WBC)
PRT	Point Retreat, AK (RAMOS) (by WBC)
ERO	Eldred Rock, AK (RAMOS) (by WBC)
4DG	Douglas, WY (by CYS)
3OI	Lamoni, IA (by DSM WSFO)
3SE	Spencer, IA (by DSM WSFO)
MLD	Malad City, ID (12–00Z 03 06 09Z) (by BOI WSFO)
GNG	Gooding, ID (Gooding Airport) (15–01Z 03Z) (by BOI WSFO)
S80	Grangeville, ID (00 06 12 18Z) (by BOI WSFO)
PHP	Philip, SD (Philip Airport) (03 06 09 1200–0000 Lcl) (by FSD WSFO)
CZZ	Campo, CA (by SAN)
SDM	San Diego, CA (Brown Field Municipal Airport) (07–23 Lcl) (by SAN)
LAX	Los Angeles, CA (Los Angeles International Airport)
SMO	Santa Monica, CA (Santa Monica Airport) (by LAX)
BUR	Burbank, CA (Hollywood-Burbank Airport) (by LAX)
LGB	Long Beach, CA (Long Beach Airport/ Daugherty Field) (by LAX)
BUO	Beaumont, CA (1400–0200Z at two HRLY intervals plus HRLY as required by WX CNDS) (by LAX)
TOA	Torrance, CA (Torrance Airport) (by LAX)
HHR	Hawthorne, CA (Hawthorne Airport) (by LAX)
SNA	Santa Ana, CA (Orange County Airport) (by LAX)
VNY	Van Nuys, CA (Van Nuys Airport) (by LAX)
AVX	Santa Catalina Island, CA (Catalina Airport) (by LAX)
FUL	Fullerton, CA (Fullerton Airport) (by LAX)
EMT	El Monte, CA (El Monte Airport) (1400–0500Z) (by ONT)
RAL	Riverside, CA (Riverside Municipal Airport) (1400–0500Z) (by ONT)
POC	Laverne, CA (Brackett Field) (07–23 Lcl) (by ONT)

CNO	Chino, CA (Chino Airport) (07–22 Lcl) (by ONT)
AK42	Sutton, AK (0645–1645 Lcl) (by MRI)
5WO	Lazy Mountain, AK (0450–0650) (by MRI)
LIC	Limon, CO (by DEN SWFO)
LXV	Leadville, CO (by DEN WSFO)
FCL	Fort Collins, CO (by DEN WSFO)
2V9	Gunnison, CO (3E GUN) (01 03 05 17 19 21 23 Lcl) (by DEN WSFO)
6V8	Montrose, CO (½ NE MTJ) (01 03 05 21 23 Lcl) (by DEN WSFO)
4LJ	Lamar, CO (by DEN WSFO)
4V5	Durango, CO (N DRO) (01 03 05 21 Lcl) (by DEN WSFO)
CV2	Salida, CO (Harriet Alexandria Field) (by DEN WSFO)
SDY	Sidney, MT (Sidney-Richland Municipal Airport) (by DEN)
SKW	Skwentna, AK (0750–1550 and 1950) (by MRI)
SVC	Silver City, NM (Grants County Airport) (by DEN)
GUC	Gunnison, CO (Gunnison County Airport) (06–16 MST) (by DEN)
HDN	Hayden, CO (by DEN)
MTJ	Montrose, CO (06–22 Lcl) (by DEN)
CEZ	Cortez, CO (Cortez Montezuma County Airport) (by DEN)
DRO	Durango, CO (Durango-La Plata County Airport) 06–20 MST) (by DEN)
GDV	Glendive, MO (Glendive Airport) (by DEN)
OLF	Wolf Point, MT (Wolf Point Airport) (by DEN)
3V9	Aspen, CO (Woody Creek) (by DEN)
VEL	Vernal, UT (Vernal Airport) (by DEN)
5WD	Seward, AK (SVC C)
5WT	Whitter, AK (SVC C)
Z22	Willow, AK (0645–1645) (by MRI)
Z00	Chulitna River Lodge, AK (0545 EA ODD HR thru 2345) (by MRI)
BOI	Boise, ID (Boise Air Terminal by BOI WSFO)
ALW	Walla Walla, WA (Walla Walla Airport)

341. SA OBSERVATIONS ENTERED BY AIRLINE VIA DEDICATED FDX NON POLLED ME-SPEED CIRCUIT (GD 09488-603)

BEH	Benton Harbor, MI (Ross Field)
BJI	Bemidji, MN (Bemidji Airport)
BKX	Brookings, SD (Brookings Airport)
BRD	Brainerd, MN (Crow Wing County Airport)
CIU	Sault Ste Marie, MI (Chippewa County International Airport)
CWA	Mosinee, WI (Central Wisconsin Airport)
DVL	Devils Lake, ND (Municipal Airport)
ESC	Escanaba, MI (Escanaba Airport)
FRM	Fairmount, MN (Fairmount Airport)
GTR	Columbus, MS (Golden Triangle Regional Airport)
IMT	Iron Mountain, MI (Ford Airport)
IWD	Ironwood, MI (Gogebic County Airport)
JVL	Janesville, WI (Rock County Airport)
MBL	Manistee, MI (Manistee-Blacker Airport)
MHE	Mitchell, SD (Mitchell Airport)
MKT	Mankato, MN (Mankato Airport)
MNM	Menominee, MI (Menominee County Airport)
MTW	Manitowic, WI (Manitowic Airport)
OTG	Worthington, WN (Worthington Airport)
RHI	Rhinelander, WI (Rhinelander-Oneida Co Airport)
TVF	Thief River Falls, MN (Thief River Falls Airport)
YKN	Yankton, SD (Chan Gurney Airport)

342. RAMOS OBSERVATIONS BY DAYTON ADAS

P07	Sanderson, TX
PUC	Price, UT
5I3	Pikeville, KY
P39	Copper Harbor, MI
P68	Eureka, NV
P58	Harbor Beach, MI
JDN	Jordan, MT
P67	Lidgerwood, ND
P61	Grand Marais
P60	Yellowstone, WY

343. RAMOS Observations via satellite to Suitland, Md. SXUS3 KWBC

AKP	Anaktuvuk
ERO	Elder Rock
IKO	Nikolski
PRT	Point Retreat
SMA	St. Marys
SHG	Shungnak
CDE	Cape Decision
CSP	Cape Spencer

344–355. RESERVED

Section 5. PILOT WEATHER REPORT (UA)

371. GENERAL

A Pilot Report (PIREP), must be appended to the hourly surface observation to be entered in the Service A, A1 poll. It must also pertain to the same location as the surface observation. During the Service A, A2/3 polls, the PIREP(s) shall be entered as individual reports. Facilities having a dedicated request-reply circuit, or Leased Service A system, may enter these data anytime between minutes 04 and 50, each hour.

372. DISTRIBUTION

PIREPs entered as individual reports shall be coded by the receiving facility to ensure it is stored and subsequently distributed, with the surface observation location nearest the condition being recorded.

373. EXAMPLES

The following examples illustrate the preparation of PIREPS, and Urgent PIREPS (UUA), for Service A:

a. A PIREP appended to an hourly report:

(1) Polled Circuit.

≡< 𝕍 < < 𝕍 DCA >(SA REPORT)/ >UA >/OV
DCA 275020 1840 FL020 /TP PA30 /SK 035 BKN 120 6𝕍

(2) Non Polled Circuit.

ZCZC <≡
DCA(SA REPORT)/ >UA >
/OV DCA 275020 1840 FL020 /TP PA30 /SK 035 BKN 120 <≡NNNN8𝕍

NOTE.—Only stations authorized will enter SA Report on non polled circuits.

b. An Urgent PIREP (UUA).

(1) Polled Circuit using "circuit break" procedure:

≡< 𝕍 < < 𝕍 OKC >UUA > <4≡
UUA /OV OKC 310010 1745 FL010 /TP BE33 /RM TORNADO TOUCHING SFC MOVG NNE4≡6𝕍

(2) Non Polled Circuit.

ZCZC <≡
OKC UUA /OV OKC310010 1745 FL010 /TP BE33 /RM TORNADO TOUCHING SFC MOVG NNE <4≡
NNNN6𝕍

c. Individual PIREP (UA).

(1) Polled Circuit entered in A2 or A3 scan.

≡< 𝕍 < < 𝕍 MKC >UA > <4≡
UA /OV MKC 1410 FL250 /TP B727 /TB LGT-MDT CAT4≡6𝕍

(2) Non Polled Circuit.

ZCZC <≡
MKC UA /OV MKC 1410 FL250 /TP B727 /TB LGT-MDT-CAT <4≡
NNNN8𝕍

d. Multiple PIREPs from same station.

(1) Polled Circuit entered in A2 or A3 scan.

≡< 𝕍 < < 𝕍 DCA >UA > <4≡
UA /OV DCA (text) <≡
UA /OV DCA 350015 (text)<≡
UA /OV DCA (text) 4≡6𝕍

(2) Non Polled Circuit.

ZCZC <≡
DCA UA /OV DCA (text)<≡
DCA UA /OV DCA 350015 >(text)<≡
NNNN8𝕍

e. Multiple PIREPs for different locations entered by one station.

(1) Polled Circuit entered in A2 or A3 scan.

≡< 𝕍 < < 𝕍 DCA >UA > <4≡
DCA UA /OV DCA (text) 4≡< < 𝕍
MGW UA /OV MGW (text) 4≡< < 𝕍
MRB UA /OV MRB (text) 4≡6𝕍

NOTE.—Stations may also use Z format for entries of multiple PIREPs for different locations entered on A2 or A3 scan.

(2) Non Polled Circuit.

ZCZC <≡
DCA UA /OV DCA (text) 4≡< < 𝕍
MGW UA /OV MGW (text) 4≡< < 𝕍
NNNN8𝕍

NOTE.—Portions underlined in examples are transmitted by WMSC during collection.

374. PIREP SUMMARY (UB)

PIREPS collected from Service A are forwarded by the WMSC to Suitland where they are compiled by computer into summaries by States. The summaries are transmitted back to the WMSC as collectives between hour plus 25 and hour plus 31 and also between plus 46 and hour plus 52 where they are available for Request/Reply retriveal using the RQ format.

a. PIREP summaries are not recommended for briefing pilots. These reports contain data already disseminated to Service A area circuits as individual PIREPs. Summaries are prepared by the NWS for forecasters and are held in WMSC storage for 3 hours.

375-380. RESERVED

Section 6. WINDS AND TEMPERATURE ALOFT FORECAST (FD)

381. GENERAL

Winds and Temperature Aloft Forecasts (FD) are computer-prepared and issued by the National Meteorological Center at Suitland, Maryland. The forecasts are valid 12 (FD1/8), 18(FD2/9) and 24(FD3/10) hours after the observation date times of 0000Z and 1200Z upon which they are based. An unscheduled amendment to an FD may be prepared and issued by a WSFO.

382. LEVELS FORECAST

Dependent upon station elevation, FD1/2/3 wind forecasts are issued for the following levels: 3, 6, 9, 12, 18, 24, 30, 34, and 39 thousand foot levels. The first level for which a wind forecast is issued is 1500 feet or more above the station elevation. Temperature is forecast for all wind levels, except the 3,000 foot level, that are 2,500 feet or more above the station. The minus signs are deleted preceding the temperatures at the 30, 34, and 39 thousand foot levels. FD8/9/10 are for the following levels, 45,000 and 53,000. They are not normally disseminated on Service A, but are available on request reply.

383. SCHEDULES

Type	*Base Data Time*	*Valid for*	*For use (period)*
FD1/8	0000Z	1200Z	0600–1500Z
FD2/9	0000Z	1800Z	1500–2100Z*
FD3/10	0000Z	0000Z	2100–0300Z
FD1/8	1200Z	0000Z	1800–0300Z
FD2/9	1200Z	0600Z	0300–0900Z#
FD3/10	1200Z	1200Z	0900–1500Z

* At 1800Z, discontinue using FD forecasts based on 0000Z data if new forecasts based on 1200Z data are available.

# At 0600Z, discontinue using FD forecasts based on 1200Z data if new forecasts based on 0000Z data are available.

384. DISTRIBUTION

All FDs are transmitted to the WMSC by NMC. Distribution by the WMSC is accomplished in accordance with established program requirements.

a. The following example, typical of distribution in the northeast U.S., illustrates the manner in which FDs are relayed by the WMSC to different categories of circuits.

```
≡< ⩛ < < ⩛ WBC>FD1<≡ (all but WSFO circuits)
  ZCZC<≡
  WBC>FD1<≡ (WSFO circuits)
  DATA>BASE>091200Z<≡
  VALID 100000Z FOR USE 1800–0300Z.  TEMPS NEG
    ABV 2400<≡
  FT 3000 6000 9000 12000 18000 24000 30000 34000
    39000<≡
  ALB__________________<≡
  BOS__________________<≡
  EMI__________________<≡
  JFK__________________<≡
  MLT__________________<≡
  PLB__________________<≡
  PSB__________________≡<    (all but WSFO circuits)
  PSB__________________≡<   ⩛ (all WSFO circuits)
  NNNN8⩛                      (all WSFO circuits)
```

b. An amended FD is distributed to the same circuits as the original FD and shall be prepared by a WSFO. Since the FD is a replaceable product, amended entries have to be complete, i.e., consist of both the amended and non-amended levels. The format is shown in the following example:

(BOS, with responsibility for MLT, is the transmitting WSFO)

```
ZCZC<≡
MLT>FD1>010620>AMD<≡
DATA BASE 010000Z<≡
VALID 011200Z<≡
FT 3000 6000 9000 12000 18000 24000 30000 34000 39000
MLT>(text)<8≡
NNNN
```

385–390. RESERVED

Section 7. AVIATION TERMINAL FORECASTS (FT)

391. GENERAL

24 hour Terminal Forecasts (FT) for selected U.S. terminals are prepared by National Weather Service Forecast offices and forwarded to the WMSC for distribution. Similar forecasts for the U.S. Military, Canada and Mexico are sent to WMSC from the National Meteorological Center (NMC) and Air Weather Service (AWS for distribution to area circuits.

392. TERMINAL FORECAST SCHEDULES

a. 48 contiguous states:

Time Zone	*LDT*	*GMT*	*Validity*	*Outlook*
Eastern	0540	0940	10Z–04Z	04Z–10Z
Central	0440	0940	10Z–04Z	04Z–10Z
Mountain	0340	0940	10Z–04Z	04Z–10Z
Pacific	0240	0940	10Z–04Z	04Z–10Z
Eastern	1040	1440	15Z–09Z	09Z–15Z
Central	0940	1440	15Z–09Z	09Z–15Z
Mountain	0940	1540	16Z–10Z	10Z–16Z
Pacific	0840	1540	16Z–10Z	10Z–16Z
Eastern	1740	2140	22Z–16Z	16Z–22Z
Central	1640	2140	22Z–16Z	16Z–22Z
Mountain	1640	2240	23Z–17Z	17Z–23Z
Pacific	1540	2240	23Z–17Z	17Z–23Z

b. Alaska:

Area	*GMT*	*Validity*
Southeastern	0340	04Z–04Z
	1040	11Z–11Z
	1440	15Z–15Z
	2040	21Z–21Z
Remainder	0440	05Z–05Z
	1140	12Z–12Z
	1640	17Z–17Z
	2140	22Z–22Z

393. PREPARATION FOR TRANSMISSION

Prepare Terminal Forecast data for entry into the MWTCS in accordance with the following examples:

a. A Forecast Office entry station, Atlanta (ATL), entering on the Forecast Office circuit the forecasts for the terminals for which it has responsibility.

```
ZCZC<≡
ATL>Z>FT≡<<⩛
AGS>131010________________..≡<<⩛
AHN 131010________________..≡<<⩛
CSG 131010________________..≡<<⩛
ATL 131010________________..≡<
NNNN 8⩛
```

NOTE.—In this example, use of the Z format reduces preparation and transmission time. The Z and the report type in the heading serve to notify the WMSC computer that all following reports (to the end of transmission) are of the stated type. WMSC recognizes NNNN as end of transmission. This format may be used only when a group is the last one transmitted; otherwise, refer to the next example.

b. A Forecast Office entry station, Salt Lake City (SLC), entering the forecasts for the terminals for which it has responsibility.

```
ZCZC<≡
SLC>FT>131010____________..≡<<⩛
OGD>FT>131010 ___________..≡<<⩛
BCE FT 131010____________..≡<<⩛
EKO FT 131010____________..≡<
NNNN 8⩛
```

NOTE 1.—This example uses the format wherein the message type (FT) is included in each message.

NOTE 2.—Both examples contain format requirements that are essential to the proper recognition and distribution of FTs, i.e. the message separator code (≡<<⩛) and the inclusion of a valid period within each message (131010).

c. Entry of Scheduled Aviation Terminal Forecast shall not be made prior to H+00 and shall be completed prior to H+40 of the scheduled hour.

d. A Forecast Office entry station, New Orleans (NEW) entering an FT amendment for a terminal for which it has responsibility:

```
ZCZC<≡
SHV>FT><≡ ≡ ≡ ≡
SHV>FT>AMD  131705  1827Z (AMENDED RE-
  PORT)<≡ ≡ ≡ ≡
NNNN
```

Section 13. FLIGHT ADVISORIES (SIGMET WS—AIRMET WA, WAC)

446. GENERAL

Flight Advisories are issued by Weather Service Forecast Offices (WSFO) to provide notice of potentially hazardous weather conditions by amending or supplementing portions of the valid area forecast (FA). They are transmitted to the WMSC over the dedicated WSFO circuits. The report type designator WS for SIGMETs, WST for convective SIGMETs, and WA for AIRMETs is used to effect selective distribution. The text of the message identifies which advisory is being transmitted. The latest message for each system is kept in the computer's active storage file by the WMSC. WA for 360 minutes, WS for 240 minutes, WST for 45 minutes.

447. PREPARATION FOR TRANSMISSION

The following examples illustrate the manner in which a Flight Advisory is prepared for transmission on the dedicated WSFO circuit.

Example 1:

ZCZC<≡
SLC>WS>262005<≡
262005-270000<≡
SIGMET ALPHA 1 (advisory, SIGMET) (first one issued for Alpha system)
<8≡
NNNN 8V

Example 2:

ZCZC<≡
MKC>WS>191512<≡
191512-191800<≡
SIGMET BRAVO 2 (advisory, SIGMET) (second one issued for Bravo system)
<8≡
NNNN 8V

Example 3:

ZCZC<≡
MSY>WA>132215<≡
132215-140000<≡
AIRMET ALPHA 1 (advisory, AIRMET) (first one issued for Alpha system)
<8≡
NNNN 8V

NOTE.—Convective SIGMETs are transmitted only by NSSFC to WMSC.

448. DISTRIBUTION

SIGMET (WS) and AIRMET (WA) messages are distributed unscheduled to all Service A circuits. Continuous AIRMETs (WAC) are distributed scheduled or unscheduled to Service A circuits in accordance with a predetermined pattern based upon its corresponding Area Fore cast (FA). Convective SIGMET (WST) is distributed priority scheduled at H+55 each hour by WMSC to all circuits.

NOTE.—WAC pertains to Alaska only.

449-455. RESERVED

Section 14. TRANSCRIBED WEATHER BROADCAST (TWEB)

456. GENERAL

The Transcribed Weather Broadcast (TWEB) and synopsis for selected routes are prepared by National Weather Service Forecast Offices and forwarded to the WMSC for distribution.

TWEB Schedule

Time Zone	*Local*	*GMT*	*Validity*
Eastern	0715	1115	11Z–23Z
Central	0615	1115	11Z–23Z
Mountain	0540	1140	12Z–00Z
Pacific	0440	1140	12Z–00Z
Eastern	1340	1740	18Z–06Z
Central	1240	1740	18Z–06Z
Mountain	1240	1840	19Z–07Z
Pacific	1140	1840	19Z–07Z
Eastern	1915	2315	23Z–17Z
Central	1815	2315	23Z–17Z
Mountain	1815	0015	00Z–18Z
Pacific	1715	0015	00Z–18Z

a. The morning and mid-day TWEB and synopsis will be valid for 12 hours. The evening TWEB and synopsis will be valid 18 hours with no outlook.

b. Eastern and Central TWEBs shall not be entered prior to H+20 for hours 10, 17 and 22 GMT. Mountain and Pacific TWEBs shall not be entered prior to H+20 for hours 11, 18 and 23 GMT.

457. PREPARATION FOR TRANSMISSION

Prepare TWEB reports for entry into the WMSC in accordance with the following examples:

a. A Forecast Office Entry station, Boston (BOS), entering on the Forecast Office circuit the TWEB synopsis and routes for which it has responsibility in the Z multiple report format.

Example:

```
ZCZC<≡
BOS>SYNS>(Report text)≡≡≡≡<<V
BOS>Z>TWEB>≡<<V
006>(Route text)≡≡<<V
007>(Route text)≡≡<<V
008>(Route text)≡≡<<V
009>(Route text)≡≡<<V
010>(Route text)<≡≡
NNNN8V
```

NOTE.—This example uses the Z format for route preparation which reduces transmission time. The Z and the report type in the heading serve to notify the WMSC computer that all following reports are of the same type. This format may be used only when a group is the only or last one transmitted. The synopsis in this example is the first group transmitted.

b. A Forecast Office entry station Boston (BOS) entering on the Forecast Office circuit the TWEB synopsis and routes for which it has responsibility in individual format.

Example:

```
ZCZ<≡
BOS>SYNS>(Report text)<≡≡≡≡
NNNN8V
```

Example:

```
ZCZC<≡
006>TWEB>(Report text)<≡≡
NNNN8V
```

Example:

```
ZCZC<≡
BOS>SYNS>(Report text)≡≡≡≡<<V
006>TWEB>(Report text)≡≡<<V
007>TWEB>(Report text)≡≡<<V
008>TWEB>(Report text)≡≡<<V
009>TWEB>(Report text)≡≡<<V
010>TWEB>(Report text)<≡≡
NNNN8V
```

NOTE.—These examples do not use the Z heading and the report type is included in each message.

c. TWEB reports are not routinely distributed on Service A circuits. Revisions or amendments will be brought to the users attention via an Alert Notice. Alert Notices are prepared by forecasters responsible for the preparation of the original TWEB routes and synopsis, and will be entered on Forecast Office circuits and relayed by WMSC to appropriate Service A circuits. The amended TWEB route or synopsis will also be prepared and sent to WMSC via Forecast Office circuits at the same time as the Alert Notice. The amended data will be available for request/reply as soon as the Alert Notice appears on the Service A area circuits.

Example 1:

```
ZCZC<≡
BOS>TWAMD<≡
BOS TWEB AMD 161808 RTE 006 AVBL<≡≡≡≡
NNNN8V
```

SDF Louisville 228 CVG-LEX-TYS
229 SDF-BNA
230 EVV-PAH

STL St. Louis 231 STL-PAH-BNA
232 STL-CGI-MEM
233 STL-SGF
234 STL-COU-MKL
235 STL-IRK
236 SGF-CGI
237 SGF-MKC
238 MKC-IRK-BRL
295 MKC LCL VCNTY FCST
298 STL LCL VCNTY FCST

DSM Des Moines 239 MKC-DSM-MCW
240 OMA-DSM-MLI
241 OMA-MCW
297 IRK-DSM-FSD
302 SUX-LCL VCNTY FCST
304 DSM-LCL VCNTC FCST
305 CID-LCL VCNTY FCST

MSP Minneapolis 242 MSP-RST-MCW
243 MSP-FSD
244 MSP-HON
245 MSP-FAR
246 MSP-DLH
247 DLH-FAR
248 DLH-INL-GFK
296 MSP-LCL VCNTY FCST

BIS Bismarck 249 GFK-MOT-ISN
250 FAR-GFK-YWG
251 BIS-FAR
252 BIS-MLS
253 BIS-ISN
254 BIS-MOT

FSD Sioux Falls 255 FSD-PIR-RAP
256 FSD-HON-BIS
257 FSD-FAR
258 RAP-BFF
259 RAP-MLS
260 RAP-BIS

OMA 261 OMA-GRI-LBF-CYS
262 OMA-SUX-FSD
263 LBF-GLD
264 LBF-BFF
265 LBF-VTN-PIR
266 LBF-FSD
301 OMA-LCL VCNTY FCST

TOP Topeka 267 MKC-ICT
268 MKC-SLN-GLD
269 MKC-OMA
270 ICT-GCK
271 ICT-RSL-LBF
272 ICT-SLN-OMA
273 GCK-GLD
293 ICT-SGF
294 TUL-CNU-MKC
299 ICT-COU
300 ICT-LCL VCNTY FCST

DEN Denver 274 DEN-AKO-LBF
275 DEN-GLD
276 DEN-LHX-GCK
277 DEN-PUB-TAD
278 DEN-EGE-GJT
279 DEN-LAR
280 DEN-CYS
281 GJT-RKS
282 GJT-PUB
283 GJT-FMN
284 FMN-TAD-GCK
306 DEN-LCL VCNTY FCST EXCP MTNS.

CYS Cheyenne 285 CPR-RAP
286 CPR-DGW-BFF
287 CPR-DGW-CYS
288 CPR-LNK-JAC
289 CPR-SHR-BIL
290 RKS-JAC
291 RKS-LND-BIL
292 RKS-RWL-LAR-CYS

GTF Great Falls
328 BIL-LVM-BZN-BTM
329 MLS-BIL-LWT-GTF
330 GTF-HVR-GGW-ISN
331 GTF-HLN-BTM-DLN-IDA
332 GTF-MSO
333 GTF-CTB-FCA
338 BTM-DRU-MSO-SOG-GEG

BOI Boise 343 IDA-JAC
345 BOI-BYI-PIH-IDA
346 BOI-EKO
347 BOI-LWS-GEG
40 IDA-SMN-MSO

SEA Seattle 353 GEG-PDT
354 GEG-ELN
355 YKN-PDT
356 YKN-DLS
357 BLI-PAE
358 SEA-Puget Sound Area
359 OLM-PDX
360 OLM-HQM-AST
361 SEA-Stampede Pass-ELN

PDX Portland, Ore. 365 PDT-BKE-BOS
366 PDT-RDM
367 PDT-DLS-PDX
368 RDM-DLS
369 RDM-BNO-BOI
371 RDM-PDX
372 PDX-EUG-MFR
373 PDX-AST
374 AST-OTH-CEC
375 CEC-MFR-LMT-LKV
376 RDM-LKV-RNO
380 SLC-OGD-RKS
381 SLC-PVU-GJT
382 SLC-MLF CDC-LAS
383 SLC-ENV-EKO
384 SLC-BYI
385 SLC-MLD-PIH
386 LAS-BCE-GJT

PHX Phoenix 390 PRC-GCN-BCE
391 PRC-FLG-INW-GUP
392 PHX-SJN
393 PHX-TUS
394 PHX-GBN-YUM
396 PHX-PRC-LAS
397 LAS-EED-BLH-YUM
398 LAS-GCN-FMN

RNO Reno 403 RNO-BOI
402 RNO-BIH
404 RNO-LOL-EKO
405 RNO-TPH-LAS
406 LAS-ELY-EKO

SFO San Francisco 411 RBL-MFR
412 RBL-LMT
413 RBL-RNO
414 RBL-SAC-FAT-BFL
415 RBL-CCR
416 RBL-ACV
417 SFO-OAK-Bay Area
418 CCR-SAC-RNO
419 CCR-TPH
420 CCR-CEC
421 SJC-BFL
422 SJC-SBA

LAX Los Angeles 426 MTN Passes N and E of LAX
427 PMD-IYK-BIH-RNO
428 VAC-DAG-LAS
429 SRN CA Deserts
430 SMO-OXR-SBA
431 LAX-BASIN
432 SNA-SAN

MJSJ San Juan
120 MJSJ-MKSC-MYNN
121 MJSJ-MKPA
122 MJSJ-MDSD

459. CROSS COUNTRY ROUTES

WMSCs storage contains a selection of combined individual route segments that defines cross country routes. These cross country routes are accessed by using the request list format defined in Chapter 6, Section 2. Section 5 defines the route segments and list number for each cross country route.

460. COMBINED TWEB ROUTES AND SYNOPSIS

WMSC stores each WSFO TWEB routes and synopsis combined in one list. These lists and their list numbers are defined in Chapter 6, Section 5.

461-466. RESERVED

Chapter 6. WEATHER MESSAGE SWITCHING SYSTEM DATA BASE

Section 1. REQUEST/REPLY CIRCUIT PROCEDURES

467. DESCRIPTION

Dedicated request-reply circuits are designed to provide specialized call-up service to FSSs and Weather Service Offices (WSO) which transmit hourly weather reports on Area circuits of the WMSC. These multipoint circuits, which parallel the 40 Area circuits, enable the transmitting stations to request, for active briefing purposes, weather messages not routinely programmed for readout on the associated Area circuit. Weather Service Forecast Offices (WSFO) also have request-reply capability on their circuits through use of the same procedures as those applicable to FSS and WSO facilities except that their request messages must be preceded by ZCZC and end with NNNN, because they are non-polled circuits.

468. CIRCUIT CONTROL

The Weather Message Switching Center (WMSC) continuously polls the FSS/WSO stations on each circuit for an input (request). The computer reviews inputs for adherence to specified criteria and sends a reply to each valid request. Parameters of circuit operations have been designed to provide equitable service to all connected stations. In general, replies to a station's request will be transmitted to the circuit immediately following the poll call for the next station in the poll list.

469. REQUEST MESSAGE PROCEDURES FOR FSS AND WSO

Request messages which may be entered on the circuit in response to a poll are of three types—**RQ**, **RC** and **RL**—which are described and prepared as follows:

a. RQ—This type of message is used in requesting an individual report or reports. It is composed of the sending station's identifier, the message type designator RQ and the reports requested (e.g., JFK SA or LAX FT). To avoid circuit usurpation, requests for this type of data may not exceed seven individual items. Requests for more than seven items will result in no response. If the reply to a request requires more than one minute to transmit, it will be delayed until completion of the poll in which the request is made. The following kinds of data, not routinely received on a particular Area circuit, may be requested by an RQ message: SA, NOTAM, FD1, FD2, FD3, SW, SD, and FT. The reply to requests for an SA will include the basic SA together with any subsequent Special (SP), amendment, or correction. It will also include all outstanding NOTAMs and Pilot Reports (UA) issued by the station originating the SA. A request for SP will result in the same reply as SA, except no NOTAM data will be included. This procedure is adequate to facilitate reviewing weather trends, but for briefing purposes, the SA request should be used to ensure all en route and/or terminal NOTAM data pertinent to the flight is available. The response to NOTAM requests will include all outstanding NOTAMs for the station specified, while requests for an FD or FT will include the current forecast on the latest amendments issued.

Example 1:

This example is a request by STL for the latest hourly observation and terminal forecast for JFK.

```
≡< ∨ < < ∨ STL>RQ>JFK>SA>JFK>FT   6∨
```

The reply appears as follows:

```
STL<≡
JFK>SA (report)
→JFK>4/21 (NOTAM)
→JFK>5/3 (NOTAM)
→JFK>5/5 (NOTAM)
JFK>UA (Pirep)
JFK>FT (forecast)
```

Example 2:

The following example is a request by ABQ for NOTAMs from Seattle:

```
≡< ∨ < <  ABQ>RQ>SEA>NTM 6∨
```

The reply will appear as follows:

```
ABQ<≡
→SEA>5/11 (NOTAM)
→SEA>5/12 (NOTAM)
```

Example 3:

To obtain headings when requesting FD data, the input message should contain a request for "data" when requesting U.S. FDs and "FCST" when requesting Canadian FDs.

≡< V < < V SEA>RQ>DATA FD1 SFO FD1 FCST FD1 YYZ FD1 6V The reply message will contain the SFO and YYZ FDs preceded by the time the data was based on, validity time, and applicable alt levels.

b. RC—This type of message is used in requesting information, such as that contained in the SACA1, MJSJ, which is available at the WMSC in collective form only. Only one collective shall be called for in a request. Those available are listed in Section 3.

Example:

This example is a request by DCA for the surface reports collective prepared by MJSJ.

≡< V < < V DCA>RC>SACA MJSJ 6V

The reply will appear on the circuit at the completion of the poll in which the request was received and it will appear exactly as transmitted to Service O preceded by the identifier DCA (the station making the request).

c. RL—This type of message is used in requesting a group of reports, forecasts or a mixture of these, to meet specific requirements. In this type of message, information is requested by specifying a single predetermined list. The lists are shown in Section 5. Only one list may be requested in each message. The lists are intended to provide groupings of individual reports such as the observations and/or forecasts for all locations in a metropolitan area or along an airway. As they are developed, new groupings will be added to Section 5.

Example:

This example is a request for list 103 which is the area forecast (FA) made by CHI and the latest flight advisories (WS and/or WA) issued by CHI since issuance of the FA. The underlined portion is transmitted by the WMSC as the poll.

≡< V < < BOS>RL>103 6V

The reply will be delayed until completion of the poll in which the request is received and will be preceded by the identifier of the requesting station (BOS in this example).

470. REQUEST MESSAGE PROCEDURES FOR WSFO

Request message procedures on the WSFO circuits are the same as those for the foregoing dedicated FSS/WSO request/reply circuits except that each request message (RQ, RC or RL) must be preceded by ZCZC and end with NNNN.

Example:

ZCZC<≡
MSY>RQ>ORD>SA>FT>MDW
>SA<≡
NNNN8V

471. WMSC NEGATIVE RESPONSE MESSAGES

The WMSC automatically generates three negative responses to request/reply inputs for which it cannot deliver.

a. NO REPORT AVBL—This response means the current data has not been received by the WMSC.

b. NOT IN SYSTEM—This response means the WMSC does not receive and store the requested data.

c. INVALID FORMAT—This response means the computer cannot process the request because of input error.

WMSC will generate only one negative response message to a (**RQ**) transmission that request multiple reports and only when all of the data requested cannot be delivered.

472-479. RESERVED

SCK SDF SEA SFO SGF SHR SHV SJT SLC SLE SMX SPI SPS SSM STC STJ STL SUX SYR TCC TCS TLH TOL TOP TPA TPH TRI TUL TUS TVC TXK TYS UIL VCT VTN WAL WMC YKM YNG YUM ZUN

495. FO22—OPERATIONAL FORECASTS

REPORTING LOCATIONS:

ABE ABI ABQ ABR ACK ACT ACV ACY AGS AHN ALB ALO ALW AMA APN AQQ AST ATL AUS AVL AVP BCE BDL BDR BFD BFF BFL BGM BGR BHM BIH BIL BIS BKW BNA BNO BOI BOS BPT BRL BRO BTR BTV BUF BVE BWI CAE CAK CAO CAR CDC CHA CHS CIR CLE CLT CMH CNK CON COS COU CPR CRP CRW CSG CVG CYS DAB DAG DAL DAY DBQ DCA DDC DEN DFW DLH DMN DRT DSM DTW EAU EKA EKN EKO ELP ELY ENV ERI ESF EUG EVV EWR EYW FAR FAT FCA FLG FMN FMY FNT FSD FSM FWA GAG GEG GGW GLS GJT GLD GRB GRI GRR GSO GSP GTF GWO HAR HAT HBR HLN HON HSV HTL HTS HVR IAD IAH ICT ILG ILM IND INL INW IPT ISN ISP JAN JAX JBR JFK LAL LAN LAS LAX LBB LBF LCH LEX LFK LGA LGB LIT LND LNK LOL LSE LWS LYH MAF MCB MCI MCN MCW MDW MEI MEM MFR MGM MIA MKE MKG MLC MLI MOB MOT MQT MSN MSO MSP MSS MSY OAK OFK OKC OLM OMA ORD ORF ORL OTH PBI PDT PDX PHL PHX PIA PIH PIR PIT PNS POM PSB PUB PVD PWM RAP RBL RDM RDU RFD RIC RKS RNM RNO ROA ROC ROW RSL RST SAC SAN SAT SAV SBA SBN SCK SDF SEA SFO SGF SHR SHV SJT SLC SLE SMX SPI SPS SSM STC STJ STL SUX SYR TCC TCS TLH TOL TOP TPA TPH TRI TUL TUS TVC TXK TYS UIL VCT VTN WAL WMC WLH YEG YKM YNG YPA YQB YQD YQR YQT YUM YVR YWG YYB YYC ZUN HDNG

496. FP1—STATE FORECASTS

REPORTING LOCATIONS:

ABQ ACY ALB ARB ATL BHM BIS BOI BOS BUF BWI CAE CHI CLE CRW CYS DEN DSM FSD FTW GTF ILG IND IPL JAN LAX LBB LIT MEM MIA MKE MSP NEW NYC OKC OMA PDX PHL PHX PIT PWM RDU RIC RNO SAT SDF SEA SFO SLC SNS STL TOP WBC

497. FP3—FORECAST EXPLANATIONS

REPORTING LOCATIONS:

BOI CLE GTF LAX PDX PHX SEA SFO SLC RNO TOP STL SDF IND CHI OMA DSM DEN ARB MKE MSP FSD BIS CYS

498. FP4—CODED CITY FORECASTS

REPORTING LOCATIONS:

ABQ ALB ARB ATL BHM BIS BOI BOS BUF CAE CHI CLE CRW CYS DEN DSM FSD FTW GTF IND JAN LAX LBB LIT MEM MIA MKE MSP NEW NYC OKC OMA PDX PHL PHX PIT PWM RDU RNO SAT SDF SEA SFO SLC STL TOP WBC

499. FP5—ZONE FORECAST

REPORTING LOCATIONS:

BOI BOS CHI CLF CRW CYS DCA FSD GTF LAX MKC MIA MKE MSP NYC OMA PDX PHX PWM RNO SEA SFO SLC WBC

500. FT—AVIATION TERMINAL FORECASTS (ALASKAN—DOMESTIC—HAWAIAN)

REPORTING LOCATIONS:

ABE ABI ABQ ABR ABY ACK ACT ACV ACY ADM ADQ AGC AGS AHN AKN ALB ALI ANC ANN ALO ALS ALW AMA ANB AND AOO APN ART ASE AST ATL ATY AUG AUS AUW AVL AVP AXN

BAB BAF BCE BDL BDR BET BFD BFF BFI BFL BGM BGR BHM BIG BIH BIL BIS BJI BKE BKW BLF BLH BLI BNA BOI BOS BPT BRD BRL BRO BRW BTL BTM BTR BTT BTV BUF BUR BWG BWI BYI BZN

CAE CAK CAR CDB CDC CDR CDS CDV CEC CGI CHA CHO CHS CID CIU CKB CLE CLL CLT CMH CMI CMX CNM CNU CON COS COU CPR CRE CRP CRW CSG CSV CTB CVG CYS

DAB DAG DAL DAN DAY DBQ DCA DDC DEC DEN DET DFW DHN DHT DIK DLG DLH DLS DMN DPA DRA DRT DSM DTW DUG DUJ BYI

EAT EAU ECG EED EGE EKN EKO ELD ELM ELP ELY ENA ENV EPH ERI ESF EUG EVV EWN EWR EYW

FAI FAR FAT FAY FCA FKL FLG FLL FLO FMN FMY FNT FOE FRM FSD FSM FWA FYV

GAG GAL GCK GEG GFK GFL GGG GGW GJT GKN GLD GLS GNV GPT GRB GRI GRR GSO GSP GST GTF GUP GWO

HBR HCA HIB HKY HLG HLN HNL HOB HOM HOT HOU HPN HQM HRL HRO HSV HTS HUF HUL HUT HVN HVR HYA

IAD IAG IAH ICT IDA ILG ILI ILM IND INK INL INT INW IPL IPT ISN ISP ITH ITO

JAC JAN JAX JBR JFK JHW JLN JMS JNU JST JXN

KOA KTN

LAF LAN LAR LAS LAX LBB LBF LCH LEB LEX LFK LFT LGA LGB LGU LIH LIT LMT LND LNK LNS LNY LOL LOZ LRD LSC LSE LUK LVS LWS LWT LYH

MAF MBS MCB MCG MCI MCN MCO MCW MDT MDW MEI MEM MER MFD MFE MFR MGM MGW MIA MIE MIV MKC MKE MKG MKK MKL MLB MIE MLC MLF MLI MLS MLU MOB MOT MPV MQT MRB MRY MSL MSN MSO MSP MSS MSY MUE

OAK OCV OFK OGD OGG OKC OLM OMA OME ONT ORD ORF ORH ORT OTH OTM OTZ OWB

PAH PAQ PBF PBI PDT PDX PFN PHF PHL PHX PIA PIH PIR PIT PKB PLN PNC PNE PNS POU PRB PRC PSB PSC PSG PSP PUB PVD PVU

RAP RBL RDD RDG RDM RDU RFD RIC RIW RKS RNO ROA ROC ROW RST RWI RWL

SAC SAF SAN SAT SAV SBA SBN SBY SCC SCK SDF SEA SFF SFO SGF SGY SHR SHV SIT SJC SJT SLC SLE SLK SLN SMF SMX SNA SNP SNS SPA SPI SPS SSI STJ STL STS SUX SWF SYR

TAL TCC TCL TCS TEB TKA TLH TOL TOP TPA TPH TRI TTD TUL TUS TVC TVL TWF TXK TYR TYS

UCA UIN UKI UNK

VCT VDZ VLD VNY VRB

WJF WMC WRG WRL

YAK YIP YKM YNG YUM

ZZV

501. FT—AVIATION TERMINAL FORECASTS (CANADIAN)

REPORTING LOCATIONS:

FSP NIL UBZ WLG YAM YAW YAY YAZ YBC YBE YBG YBK YBR YBT YCA YCB YCD YCG YCH YCL YCO YDA YDB YDF YDN YED YEG YEU YEV YFB YFC YFS YGA YGM YGP YGQ YGR YGV YGW YGX YGY YHD YHI YHM YHO YHU YHY YHZ YIC YJT YKA YKL YLG YLT YLW YMA YMD YMJ YMM YMO YMT YMV YMX YNA YNM YOD YOJ YOW YOX YPA YPE YPG YPL YPR YPY YQA YQB YQD YQF YQG YGH YQI YQK YQL YQM YQQ YQR YQT YQU YQV YQW YQX YQY YQZ YRB YRI YRL YRQ YRV YSA YSB YSC YSJ YSM YSU YSV YSY YTH YTL YTR YTS YTZ YUB YUC YUL YUN YUR YUV YUW YUX YUY YUZ YVC YVM YVN YVO YVP YVQ YVR YVV YWA YWG YWK YWL YWP YWR YXC YXD YXE YXH YXJ YXL YXR YXS YXT YXU YXX YXY YYB YYC YYD YYE YYF YYG YYJ YYL YYN YYQ YYR YYT YYU YYW YYY YYZ YZD YZE YZF YZH YZP YZS YZT YZU YZV YZX YZY ZUE ZUM

506. FTUS—AVIATION TERMINAL FORECASTS (MILITARY)

REPORTING LOCATIONS:

ADW AEX BAB BSM DLF DOV DYS EDW EFD END FWH GRK HMN HST IAB LSV LTS MCC MCF MER MGE MHR MIB MUO MYR NBE NGP NGU NGC NHK NID NIP NIR NKX NLC NPA NQI NTD NUQ NZJ NZY OAR PAED PAEI PHNA REE RIV RND SBD SKA SKF SUU SZL TCM TIK VBG VCV WRI

503. FT—AVIATION TERMINAL FORECAST (MEXICAN)

REPORTING LOCATIONS:

ACA CEN CJS CUN CUU CZM GDL HMO LAP MAM MEX MID MTY MXL MZT NLD NOG PVR TAM TAP TIJ VER

504. FZ6—MARINE FORECASTS (PACIFIC)

REPORTING LOCATIONS:

LAX PDX SEA SFO

WFJ WFM WFN WFV WGB WGE WGN WGM WGQ WHC WHE WHJ WHL WHT WIK WJA WKC WKG WKY WLB WLH WLO WLX WLY WMW WMP WNI WPF WPN WPZ WRD WRP WSA WSQ WTL WUU WUV WUW WVM WVT WXK WYI YAE YAM YAW YAY YAZ YBC YBE YBG YBL YBR YBT YCB YCD YCG YCH YCL YCO YCT YDA YDB YDC YDF YDN YDQ YEC YED YEG YEN YEO YET YEV YFC YFO YFR YFE YGA YGD YGH YGK YGP YGR YGV YGW YGX YHB YHD YHE YHM YHU YHY YHZ YIB YIX YJT YKA YKF YKL YLD YLJ YLL YLW YMA YMJ YMM YMO YMT YMV YNE YNM YOC YOC YOJ YOW YPA YPB YPE YPG YPH YPQ YPR YPW YPY YQA YQB YQD YQF YQG YQH YQI YQK YQL YQM YQQ YQR YQT YQU YQV YQW YQX YQY YQZ YRB YRJ YRL YRM YRQ YRV YSB YSC YSJ YSM YSN YSU YSY YTH YTL YTR YTS YTW YTZ YUI YUK YUL YUR YUS YUX YUY YUZ YVC YVG YVN YVO YVP YVQ YVR YVV YWA YWG YWK YWL YWR YWY YXC YXD YXE YXH YXI YXJ YXL YXQ YXR YXS YXT YXU YXX YXY YXZ YYB YYC YYD YYE YYF YYG YYJ YYL YYN YYQ YYR YYT YYU YYW YYY YYZ YZD YZE YZF YZH YZP YZR YZS YZT YZU YZV YZW YZX YZY ZPC ZUE ZUM

515. SA—HOURLY AVIATION WEATHER (ALASKAN)

REPORTING LOCATIONS:

ADK ADQ AGN AIN AK42 AKN ANC ANI ANN ATU BET BIG BRW BTI BTT CDB CDV CRC CSH CYT DLG DUT ELV ENA ENN FAI FIV FNR FWL FYU GAM GKN GST HOM ILI JNU JOH KAE KPC KSM KTN LNI MCG MDO MHM MLY MRI MXY OLI OME ORT OTZ PAQ PIZ PSG PTH PTI PUO RBY SCC SDP SGY SIT SKJ SKW SNP SSR TAL TKA UMN UMT UNK VDZ VWS WCR WRG YAK Z00 Z12 Z20 Z22 Z26 Z27 Z30 Z49 Z76 5BI 5CE 5EA 5HN 5HR 5GN 5PX 5SO 5WD 5WO 5WT

516. SD—RADAR WEATHER REPORT

REPORTING LOCATIONS:

ALB ALO AMA APN AQQ ATL AUS AYS BAD BDL BFF BFS BGM BGS BIS BLV BNA BOS BRO BTR BUF BYH CAE CAK CHH CHS CKL CLE CMH CNK COS COU CRP CVG CYS DAB DLF DLH DSM DTW EEW EVV EYW FAR FEW FFO FNT FSD FSM FWA FWH GK GFA GGG GLD GLS GRI GSB GVW HAT HDO HMN HON HST HSV HTL IAB ICT ILM IND ISN JAN LBB LBF LCH LIC LIZ LRF MAF MCF MCI MCN MEI MFR MGE MIA MIB MKC MKG MLI MMO MOB MSN MSO MSP MTC MXF NHK NHZ NPA NQA NYC OFF OFK OKC ORH OSC PAM PBG PIT PMD POB RAP RCA RDR RDU RME RND RST SAC SAW SDF SEM SEP SHV SIL SJT SPS STL TBW TIK TOP TRI TUL UMN VCT WRI XNK ZAB ZLC ZSE1M1 3NO 7VM

517. SI—SYNOPTIC SURFACE REPORTS—INTERMEDIATE

REPORTING LOCATIONS:

NNCR 72349 72402 72433 72599 72613 72648 72650 72676 72683 72695 72741 72743 72755 72789 72798 74494

518. SM—SYNOPTIC SURFACE REPORTS—MAIN

REPORTING LOCATIONS:

70026 70086 70133 70200 70219 70231 70261 70273 70308 70316 70326 70350 70361 70398 70454 72201 72202 72203 72205 72206 72207 72208 72211 72214 72217 72218 72219 72223 72226 72228 72231 72234 72235 72240 72242 72243 72248 72250 72251 72253 72254 72255 72256 72259 72261 72263 72265 72266 72267 72268 72270 72274 72278 72280 72290 72295 72304 72306 72308 72310 72311 72312 72314 72315 72317 72324 72326 72327 72334 72340 72344 72348 72349 72351 72353 72356 72363 72365 72374 72384 72386 72389 72395 72401 72402 72403 72405 72406 72407 72408 72410 72411 72412 72414 72421 72422 72423 72425 72428 72429 72432 72433 72434 72438 72439 72440 72445 72446 72450 72451 72456 72458 72464 72465 72469 72476 72486 72488 72492

72494 72503 72504 72507 72508 72509 72513 72515 72517 72518 72519 72520 72521 72523 72524 72525 72528 72529 72530 72532 72533 72534 72535 72536 72537 72544 72546 72547 72552 72553 72556 72557 72562 72564 72569 72570 72572 72576 72578 72583 72591 72594 72597 72599 72605 72608 72608 72612 72613 72614 72615 72616 72617 72618 72635 72637 72638 72640 72641 72644 72645 72648 72650 72651 72652 72654 72655 72658 72659 72662 72666 72676 72677 72681 72683 72688 72693 72694 72698 72712 72734 72741 72743 72745 72747 72753 72755 72764 72768 72772 72773 72775 72777 72779 72781 72784 72785 72789 72791 72793 72797 74465 74483 74484 74486 74494 74595 74798 78016

519. SR1—CROP REGION, RIVER, CORN AND WHEAT, FRUIT SERVICE, FIRE WEATHER, AND HORTICULTURAL REPORTS

a. *EASTERN REPORTING LOCATIONS:*

ACT AGC AGS ALB ATL AUS AVL BGM BNA BRO BTV BUF CAE CLE CMH CNK CON CRP CRW CVG DCA DDC DFW DLH DRT DSM ESC EVV FWA GRB GRR HAR HON HOU ICT IND JAN LAN LCH LIT LSE MCN MEM MGM MKC MKE MKG MLI MOB MSP MSY OFK OKC OMA OSW PNF PUB RDU ROC SAT SDF SHV STL SUX TOL TOP TTN TUL TYS

b. *WESTERN REPORTING LOCATIONS:*

ABQ AST BIL BIS BOI CYS DEN ELP FAR FAT FCA GEG GGW GJT GTF HLN HVR LAX LWS MFR MSO SAC SLC

520. SW—SUPPLEMENTARY AVIATION WEATHER

REPORTING LOCATIONS:

BKX BMI BWD CAO CPS CVN DNV E23 FOD GNT HCA IYK LBL LHU LRU LWS MDH MEV MTO MVN N40 ONM PKV PQI PSF PSK PWT RUI RWI SGU TTN U17 U71 3OI 3SE 3TH 4CR 4GB 4MY 5B6

521. SX—DEGREE—DAY REPORT

REPORTING LOCATIONS:

ABQ ALB ATL BHM BIS BOI BOS BUF CAE CHI CLE CRW CYS DCA DEN DSM DTW FSD FTW GTF IND JAN LAX LBB LIT LOU MEM MIA MKC MKE MSP MSY NYC OKC OMA PDX PHL PHX PIT PWM RDU SAT SDF SEA SFD SFO SLC STL TOP

522. SYNS—TRANSCRIBED WEATHER BROADCAST SYNOPSES

REPORTING LOCATIONS:

ABQ ALB ARB ATL BHM BIS BOI BOS BUF CAE CHI CLE CRW CYS DEN DFW FSD GTF IND JAN LAX LBB LIT MEM MIA MKE MSP MSY NYC OKC OMA PDX PHL PHX PIT PWM RDU RNO SAT SDF SEA SFO SLC STL TOP WBC

523. TWAMD—TRANSCRIBED WEATHER REPORTS

REPORTING LOCATIONS:

See (SYNS) list.

524. TWEB—TRANSCRIBED WEATHER BROADCAST

REPORTING LOCATIONS:

001 002 003 004 005 006 007 008 009 010 011 012 013 014 015 016 017 018 019 020 021 022 023 024 025 026 027 028 029 030 031 032 033 034 035 036 037 038 039 040 041 042 043 044 045 046 047 048 049 050 051 052 053 054 055 056 057 058 059 060 061 062 063 064 065 066 067 068 069 070 071 072 073 074 075 076 077 078 079 080 081 082 083 100 101 102 103 104 105 106 107 108 190 110 111 112 113 114 115 116 117 118 119 120 121 122 123 124 125 126 127 128 129 130 131 132 133 134 135 136 137 138 139 140 141 142 143 144 145 146 147 148 149 150 151 152 153 154 155 156 157 158 159 160 161 162 163 164 165 166 167 168 169 170 171 172 173 174 175 176 177 178 179 180 181 182 183 184 185 186 187 188 189 190 191 192 193 194 195 196 197 198 199 200 201 202 203 204 205 206 207 208 209 210 211 212 213 214 215 216 217 218 219 220 221 222 223 224 225 226 227 228 229 230 231 232 233 234 235 236 237 238 239 240 241 242 243 244 245 246 247 248 249 250 251 252 253 254 255 256 257 258 259 260 261 262 263 264 265 266 267 268 269 270 271 272 273 274 275 276 277 278 279 280 281 282 283 284 285 286 287 288 289 290 291 292 293 294 295 296 297 298 320 321 322 323 324 325 326 327 328 329 330 331 332 333 334 335 336 337 338 339 340 341 342 343 344 345 346 347 348 349 350 351 352 353 354 355 356 357 358 359 360 361 362 363 364 365 366 367 368 369 370 371 372 373 374 375 376 380 381 382 383 384 385 386 390 391 392 393 394 395 396 397 398 399 403 404 405 406 410 411 412 413 414 415 416 417 418 419 420 421 422 423 424 425 426 427 428 429 430 431 432 433 434

Section 4. WEATHER COLLECTIVES (USE RC PROCEDURES)

581. WMSC DATA BASE

AAAK36 KWBC
AAPA38 KWBC
AAUS30 KWBC
AAUS31 KWBC
AAUS32 KWBC
AAUS33 KWBC
AAUS34 KWBC
AAUS35 KWBC
AAWMS TEST
ABAK1 PANC
ABAK2 PANC
ABCA1 KMIA
ABCA20 KMIA
ABUS1 KWBC
ABUS11 KWBC
ABUS12 KWBC
ABUS13 KWBC
ABUS14 KWBC
ABUS15 KWBC
ABUS2 KWBC
ABUS23 KWBC
ABUS24 KWBC
ABUS25 KWBC
ABUS26 KWBC
ABUS3 KWBC
ABUS4 KWBC
ABUS6 KWBC
ABXX11 KMIA
ABXX11 KSFO
ABXX11 PHNL
ABXX15 KMIA
ABXX15 KSFO
ABXX15 PHNL
ABXX13 KWBC
ABXX5 KWBC
ABXX6 KWBC
ACUS KGWC
ADMN PADK
ADMN PANC
ADMN PHNL
ADMN1 KNKA
ADMN1 KWBC
ADMN1 PANC
ADMN1 PHNL
ADMN5 PHNL
AHXN1 KWBC
AHXN2 KWBC
AHXN3 KWBC
AHXN4 KWBC
ARUS40 KABQ
ARUS40 KPMD
ARUS40 KSEA
ARUS40 KSLC
ASAK PANC
ASUS1 KWBC
ASUS10 KMKC
ASXX21 EGRR
AUNA1 KWBC
AUNA2 KWBC
AUOC2 AMMC
AXAC1 NSS
AXCA MJSJ
AXCA20 KMIA
AXUS41 KWBC
AXUS42 KWBC
AXUS43 KWBC
AXUS44 KWBC
AXUS45 KWBC
BIXX KCMC
CIRNOT1
CONT1 KWBC
CSAA1 FASE
CSAA1 SABM
CSAD1 DEMS
CSAF1 EDZW
CSAF2 EDZW
CSAG1 SABM
CSAG2 SABM
CSAK1 PANC
CSAK12 PANC
CSAL1 DAMM
CSAO1 GOOO
CSAO20 GOOO
CSAO21 GOOO
CSAR1 DEMS
CSAR1 OEJD
CSAS1 RJTD
CSAS1 VTBB
CSAU AMMC
CSBA1 MYNN
CSBE MXKF
CSBG1 MLTM
CSBM1 VBRR
CSBU LZSO
CSBX1 EBBR
CSBY RUMS
CSBZ SBBR
CSBZ1 SBBR
CSBZ2 SBBR
CSCA MKJP
CSCA1 MACC
CSCA1 MDSD
CSCA1 MFFF
CSCA1 MGGT
CSCA1 MHIC
CSCA1 MHTG
CSCA1 MJSJ
CSCA1 MKPB
CSCA1 MKPO
CSCA1 MKPP
CSCA1 MNMG
CSCA1 MRSJ
CSCA1 MSSS
CSCA1 MZBZ
CSCL1 DEMS
CSCN1 CWTO
CSCO1 MCBO
CSCY1 LCRA
CSCZ1 OKPR
CSDD1 DIPD
CSDL1 EDZW
CSEA1 HKNC
CSEQ1 SEQU
CSEU1 EDZW
CSFA1 EKMI
CSFG1 MOOO
CSFI1 EFKL
CSFM1 GMMC
CSFR1 LFPW
CSGI1 EGRR
CSGL1 EKMI
CSHK1 VHHH
CSHU1 HABP
CSIE1 EIDB
CSIL1 BIRK
CSIN1 DEMS
CSIQ1 DEMS
CSIR1 OIII
CSIS1 LLBD
CSJP1 RJTD
CSJP2 RJTD
CSKO RKSL
CSKU1 NCRG
CSME1 LIIB
CSME2 LIIB
CSMN MVMR
CSMU1 VHHH
CSMX MXBA
CSNC1 NWWB
CSNL1 EHDB
CSNO11 ENMI
CSNZ1 NZKL
CSOF1 NTTT
CSOS1 LOWM
CSPA1 PHNL
CSPH1 RPMK
CSPH1 RPMM
CSPK1 OPKC
CSPL1 SOWR
CSPM MBHO
CSPO1 LPPT
CSPR SPIM
CSPS1 NFFN
CSRA1 RJTD
CSRA10 RUHB
CSRA10 RUMS
CSRA10 RUNW
CSRA10 RUTK
CSRO1 YRBK
CSRS1 LIAA
CSRS10 RUMS
CSSA MLTM
CSSA1 MEZY
CSSN1 ESWI
CSSP1 LEMM
CSSR1 WSSS
CSSW1 LSZW
CSSY1 OSDI
CSTH1 VTBB
CSTK1 NSAP
CSTS1 DTTA
CSTU1 LTAA
CSUK1 EGRR

CSUR RUMS
CSUY1 SUMU
CSVM1 VVVS
CSVN MVMR
CSVN1 MVBS
CSXN1 EDZW
CSXN2 EDZW
CSXS1 EDZW
CSXX1 CFSP
CSXX1 EDZW
CSXX1 KWBC
CSXX1 LFPW
CSXX1 LIIB
CSXX2 EDZW
CSXX2 KWBC
CSXX2 LIIB
CSXX3 KWBC
CSXX3 LIIB
CSXX4 KWBC
CSXX5 KWBC
CSYG1 LYBM
CSZA1 FAPR
CUBE MXKF
CUCA1 MFFF
CUCA1 MFFR
CUFG1 MOOO
CUMX MXBA
CUXX1 KWBC
DFAK1 KWBC
DFCA1 KWBC
DFHW1 KWBC
DFUS1 KWBC
DFXX21 KWBC
FABA20 MYNN
FABZ SBBR
FACA KMIA
FACA MPHO
FACA MMMX
FACA1 MHTG
FACN1 CWHX
FACN1 CWUL
FACN1 CYQX
FACN1 CWVR
FACN1 CYXY
FACN1 CYYZ
FACN1 CWEG
FACN1 CWWG
FACN2 CWUL
FACN2 CWEG
FACN2 CWWG
FACN2 CYQX
FACN3 CWEG
FACN3 CWUL
FACN3 CWWG
FACN4 CWEG
FACN4 CWWG
FACN5 CWEG
FACN5 CWWG
FACN6 CWEG
FACN2 CYXY
FACO MCBO
FAHW PHNL
FANT1 KWBC
FANT2 KWBC
FAPA1 KWBC
FAPR SPIM
FASA20 MKPP
FAUS40 KSLC
FAVN MVMI
FBAG20 SABM
FBAG21 SABM
FBAK1 PANC
FBBZ SBBR
FBBZ SBGL
FBHW PHNL
FBNT1 KWBC
FBNT2 KWBC
FBPA1 KWBC
FBPA2 KWBC
FBPS5 NZAK
FBPS10 NFFN
FBPS11 NFFN
FBPS14 NFFN
FBPS15 NFFN
FCGM PGUM
FCJP7 KAWN
FDAK4 KWBC
FDCA1 KWBC
FDCA2 KWBC
FDCA3 KWBC
FDCA4 KWBC
FDCA5 KWBC
FDCA6 KWBC
FDCN1 KWBC
FDCN2 KWBC
FDCN3 KWBC
FDCN40 KWBC
FDCN41 KWBC
FDCN42 KWBC
FDHW PHNL
FDUS4 KWBC
FDUS5 KWBC
FDUS6 KWBC
FDUS7 KWBC
FEUS40 KWBC
FHPA1 KSFO
FHPA1 PHNL
FHPN KSFO
FJUS47 KGWC
FJUS57 KGWC
FJXN1 KWWA
FKAK1 PAFA
FKAK1 PANC
FKUS1 KWBC
FKUS2 KWBC
FMAK1 KWBC
FMUS41 KWBC
FMUS42 KWBC
FOAK1 PANC
FOAK2 PANC
FOAK3 PANC
FOAK5 PAED
FOAK6 PAED
FOAK7 PAED
FOAK8 PAED
FOHW1 PHNL
FOHW2 PHNL
FOHW3 PHNL
FOUS15 KWBC
FOUS16 KWBC
FOUS17 KWBC
FOUS40 KWBC
FOUS41 KWBC
FOUS42 KWBC
FOUS43 KWBC
FOUS50 KWBC
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UCVD2 KSFO
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UFCA1 MDSD
UFAC1 MKJP
UFCA1 MKPB
UFCA1 MRSJ
UFCA20 MJSJ
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UFMX2 MXBA
UFVD20 KSFO
UFD1 CWVR
UFWD40 CYVR
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UGAF9 EDZW
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UGCG20 FZBB
UGFG20 MOOO
UGHW1 PHBK
UGHW1 PHLI
UGHW1 PHTO
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UHAF1 EDZW
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UJHW44 KAWN
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UKIV1 DIII
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UFHW1 PHTO
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UFWD40 CYVR
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UGHV20 DHHH
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UGHW1 PHTO
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UICN51 CWTO
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UINZ8 NZKL
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UKAG4 SABM
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UKAL1 DAMM
UKBA1 MYNN
UKCH1 SABM
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UNUS1 KWSD
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UPMX2 MXBA
UPNZ1 NZKL
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WSGM PGUM
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WSNT KJFK
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WTPS35 PGFW
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WWCA23 KMIA
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WWCA25 KMIA
WWIO1 PGFW
WWIO2 PGFW
WWJP20 RJTD
WWJP21 RJTD
WWNT20 KWBC
WWPN21 PHNL
WWPN22 PHNL
WWPN23 PHNL
WWPN24 PHNL
WWPN25 PHNL
WWSA SBBR
WWUS1 KNEW
WWUS9 RWRD
WMXX KGWC
WWXX82 KGWC

582-591. RESERVED

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Section 5. LIST OF RL NUMBERS WITH CONTENTS OF EACH LIST (USE RL PROCEDURES)

592. GENERAL

The WMSC computer is capable of storing 500 predefined data lists. The procedure for requesting these lists are outlined in Section 1.

593. NFDC SPECIAL NOTAM LIST

RL000 contains a list of NOTAMs for all domestic civil reporting locations. This list can only be requested by NFDC.

594. FDC NOTAM LIST

RL001 contains a list of all current FDC NOTAM numbers issued for the last 12 and 24 hours.

595. MEXICAN INDIVIDUAL AVIATION TERMINAL FORECAST

RL002 contains a list of individual terminal forecast in alphabetical order by station identifier.

596. ALASKAN ROUTE BRIEFING LISTS

The following lists contain weather data compiled for routes in Alaska:

040 ANC to YEG via Coast
041 ANC to YEG via Highway
042 ANC to SCC via Fairbanks
043 ANC to CDB via Lake Clark Pass
044 ANC to BET via Sparrevohn/McGrath
045 ANC to OTZ via Rainy/Ptarmigan Pass

597. ALASKAN VOLMET BROADCAST

RL046 contains data for the Alaskan VOLMET broadcast.

598. SPECIAL LISTS FOR CHICAGO FSS DTE TEST

RL049 through RL067 contain data for route briefings radiating out from Chicago FSS. These lists are for testing only and shall not be used by other facilities.

599. SEVERE WEATHER WARNING LIST

RL100 contains severe weather warning **(WW)** bulletins and associated status bulletins **(WW-A)** current for the last 6 hours.

600. SERVICE A, C, O GENOT LIST

RL101 contains Service A and C GENOTs issued within the last 24 hours and Service O GENOTs issued within the last 6 hours.

601. AVIATION AREA FORECAST/SIGMET-AIRMET

The following lists contain the Area Forecast and associated SIGMET and AIRMETs:

102 BOS WSFO Area
103 CHI WSFO Area
104 WBC WSFO Area
107 DFW WSFO Area
110 MIA WSFO Area
113 MSY WSFO Area
115 SFO WSFO Area
116 SLC WSFO Area

602. SPECIAL LISTS NATIONAL METEOROLOGICAL CENTER (NMC)

The following lists contain Service C synoptic observations and upper air data for the entire United States. These lists are used to restore the NWS National Meteorological Centers (NMC) computer data base. These lists shall be requested by NMC only.

RL118 Synoptic Observations (SM)
RL119 Upper Air Data (UX)

603. SPECIAL LISTS ARTCC 9020

The following lists contain data for the purpose of restoring ARTCC 9020 weather data bases. Facilities other than ARTCCs shall not request these lists:

123 MKC ARTCC
124 LAX ARTCC
125 MSP ARTCC
126 MSP ARTCC
127 CHI ARTCC
128 MKC ARTCC
129 OAK ARTCC
130 SLC ARTCC
131 JAX ARTCC
132 DCA ARTCC
133 MIA ARTCC
134 LAX ARTCC
135 ATL ARTCC
136 SEA ARTCC
137 MEM ARTCC
138 DEN ARTCC
139 NYC ARTCC
140 BOS ARTCC
141 FTW ARTCC
142 CLE ARTCC
143 ABQ ARTCC
144 HOU ARTCC
145 IND ARTCC

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